

Appln No. 09/692,554

Amdt date December 1, 2004

Reply to Office action of September 22, 2004

Amendments to the Drawings:

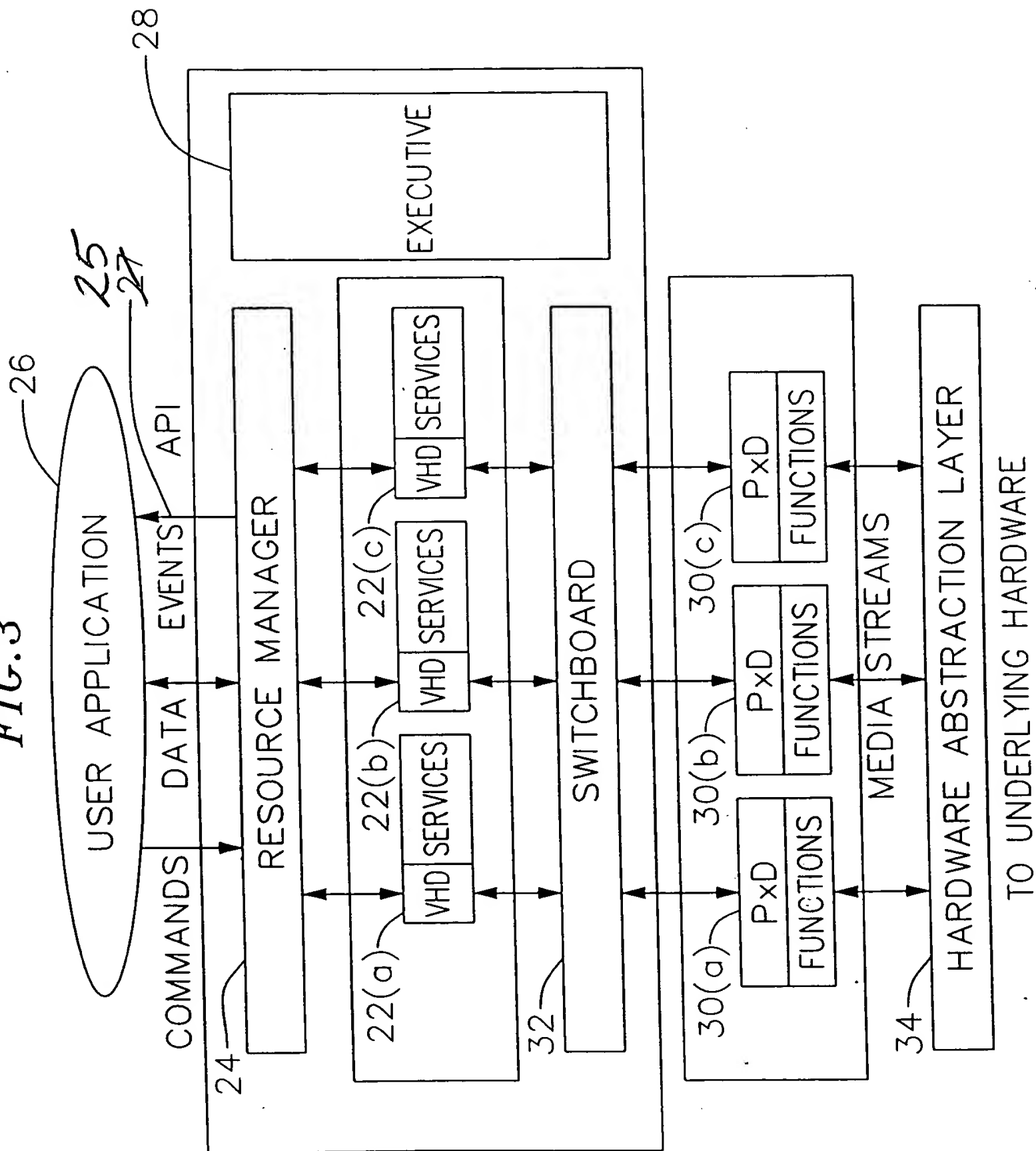
The attached sheet of drawings includes changes to Figs. 3, 14A and 35. The enclosed 35 sheets formal drawings include the changes to Figs. 3, 14A and 35 and replace all of the drawings as originally filed.

Attachment: Replacement Sheet

Annotated Sheet Showing Changes



FIG. 3



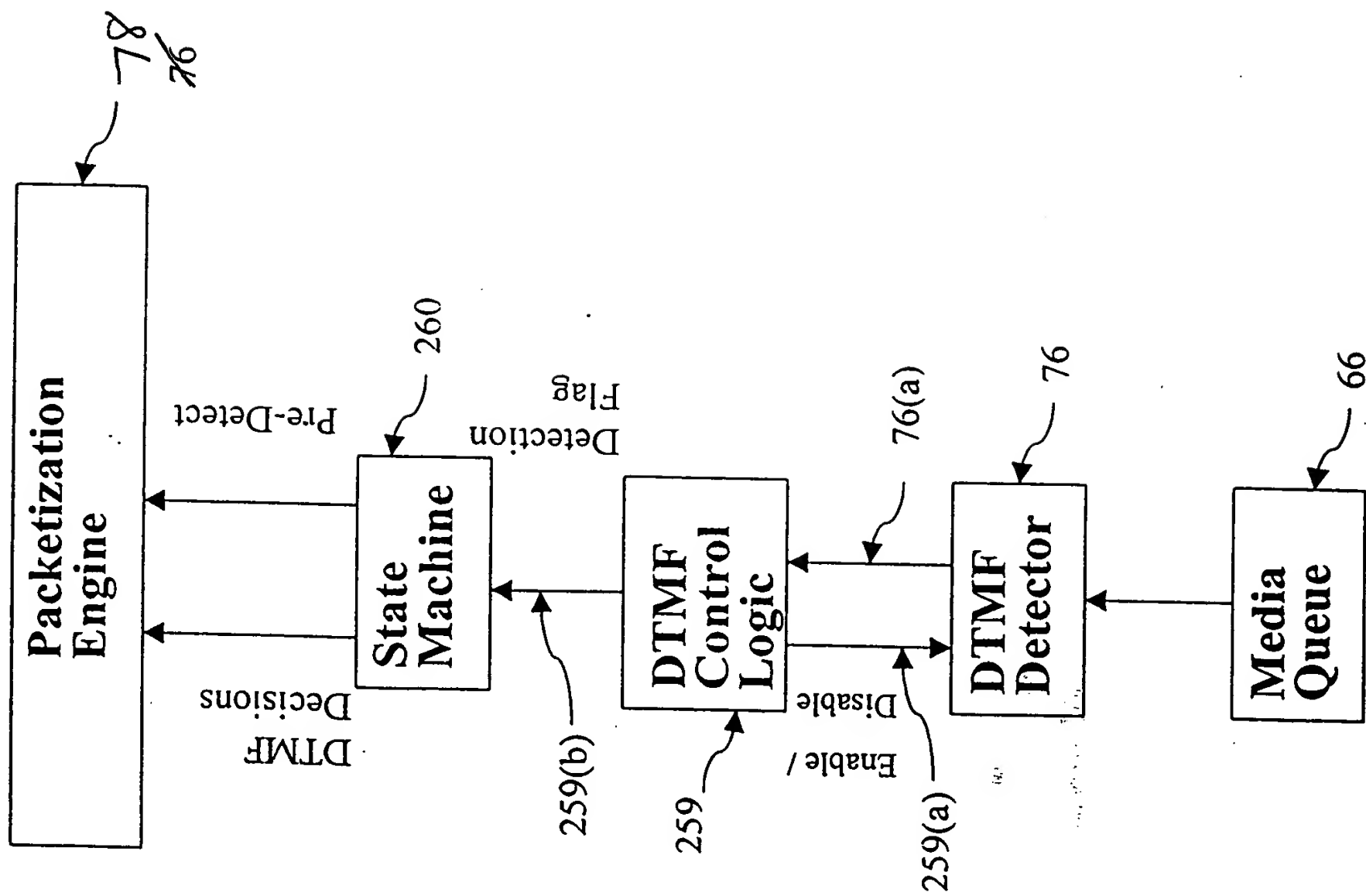


FIG. 14A

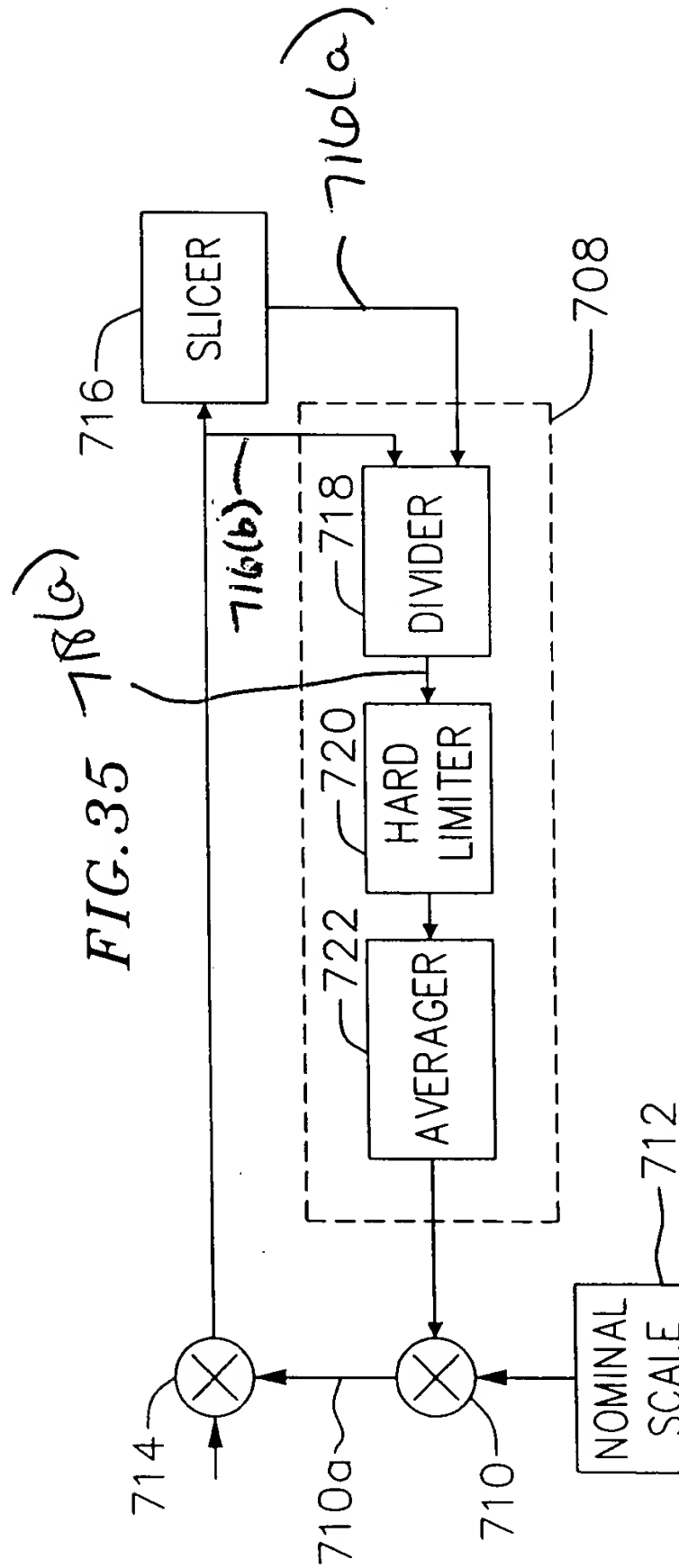
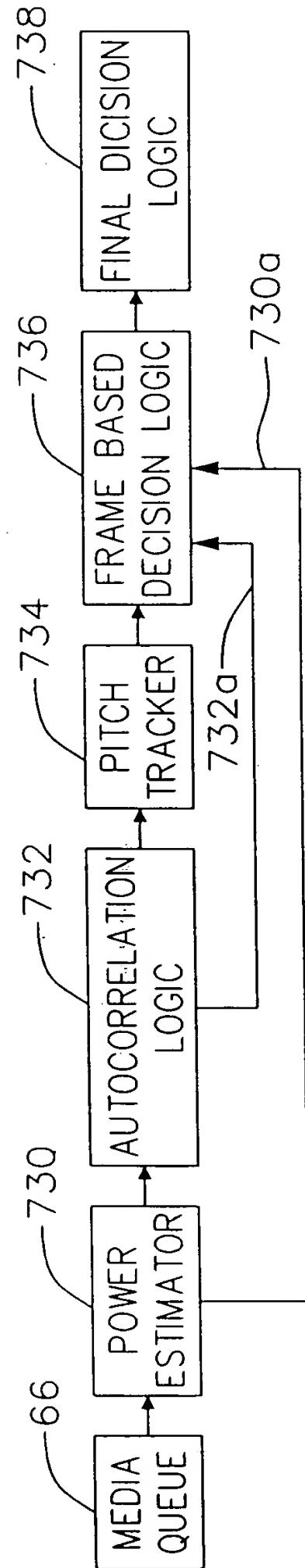


FIG. 36



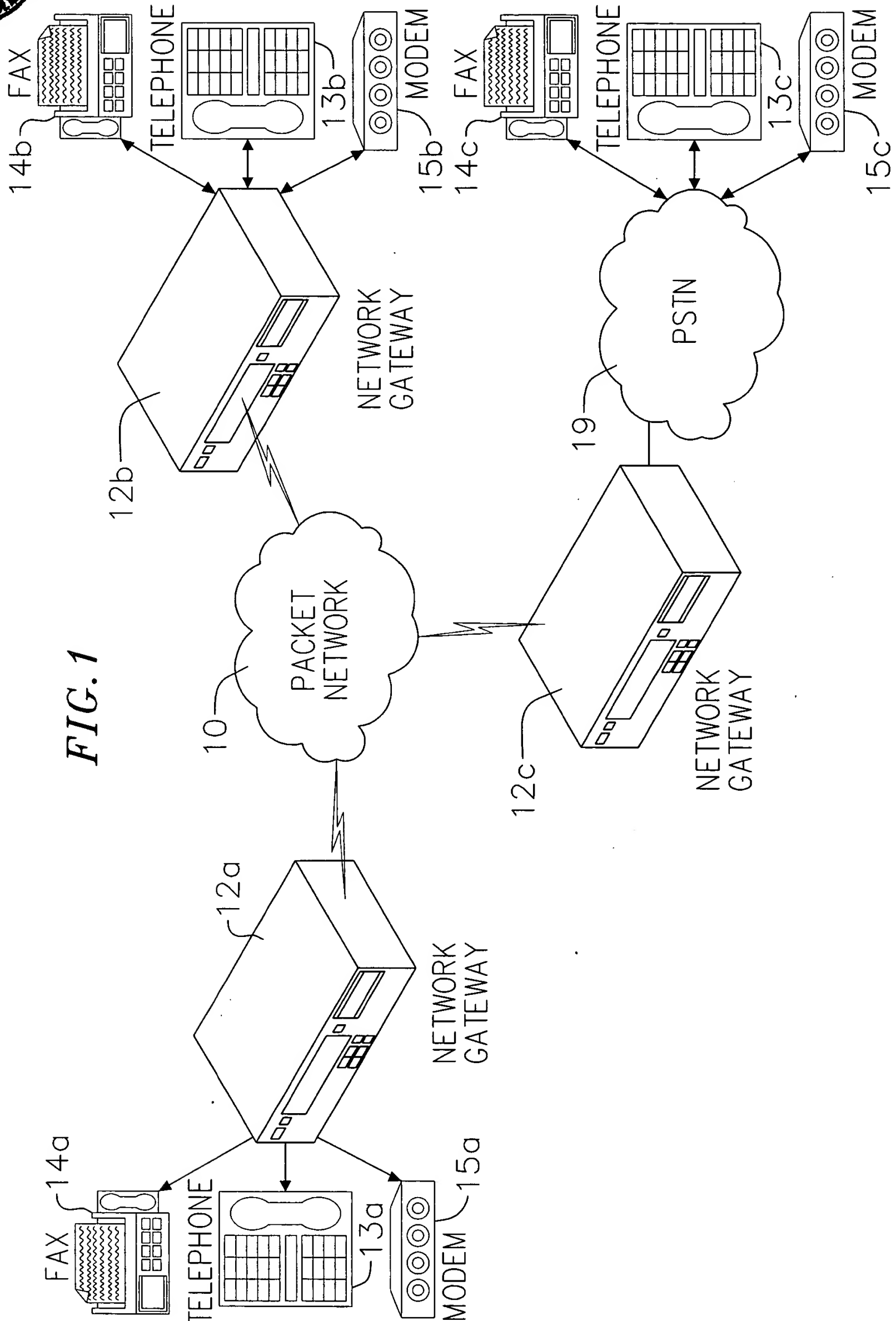




FIG. 2

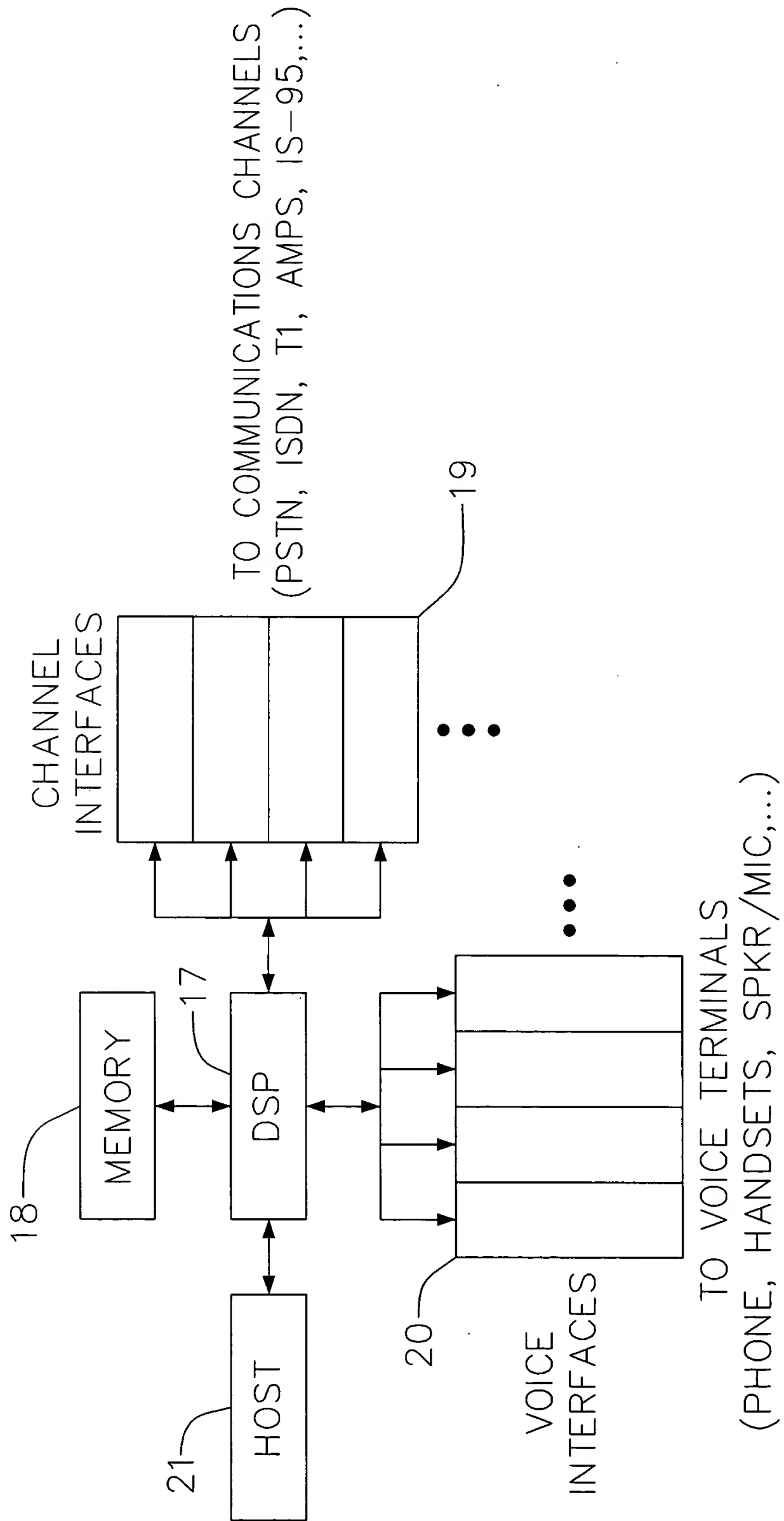




FIG. 3

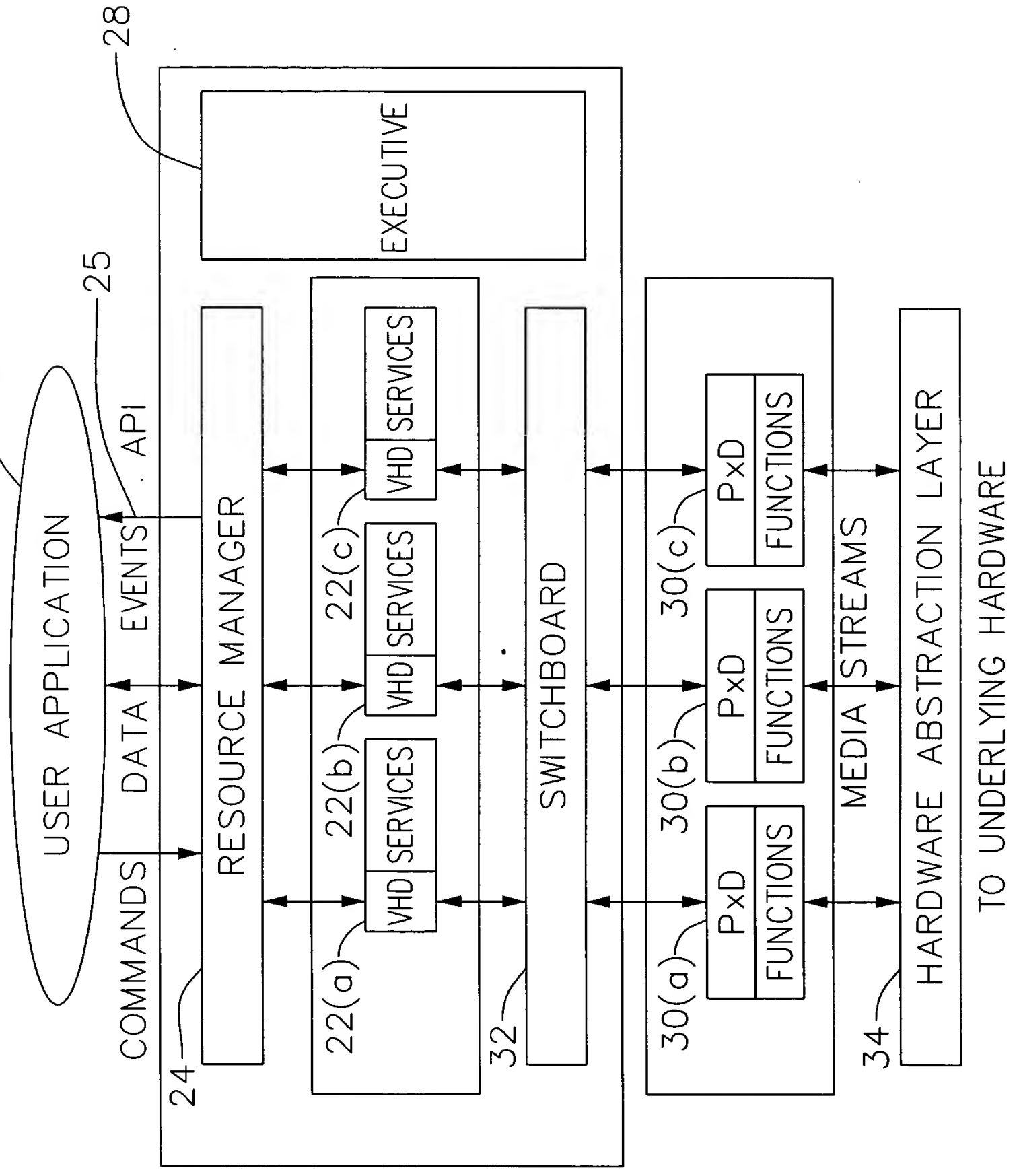




FIG. 4

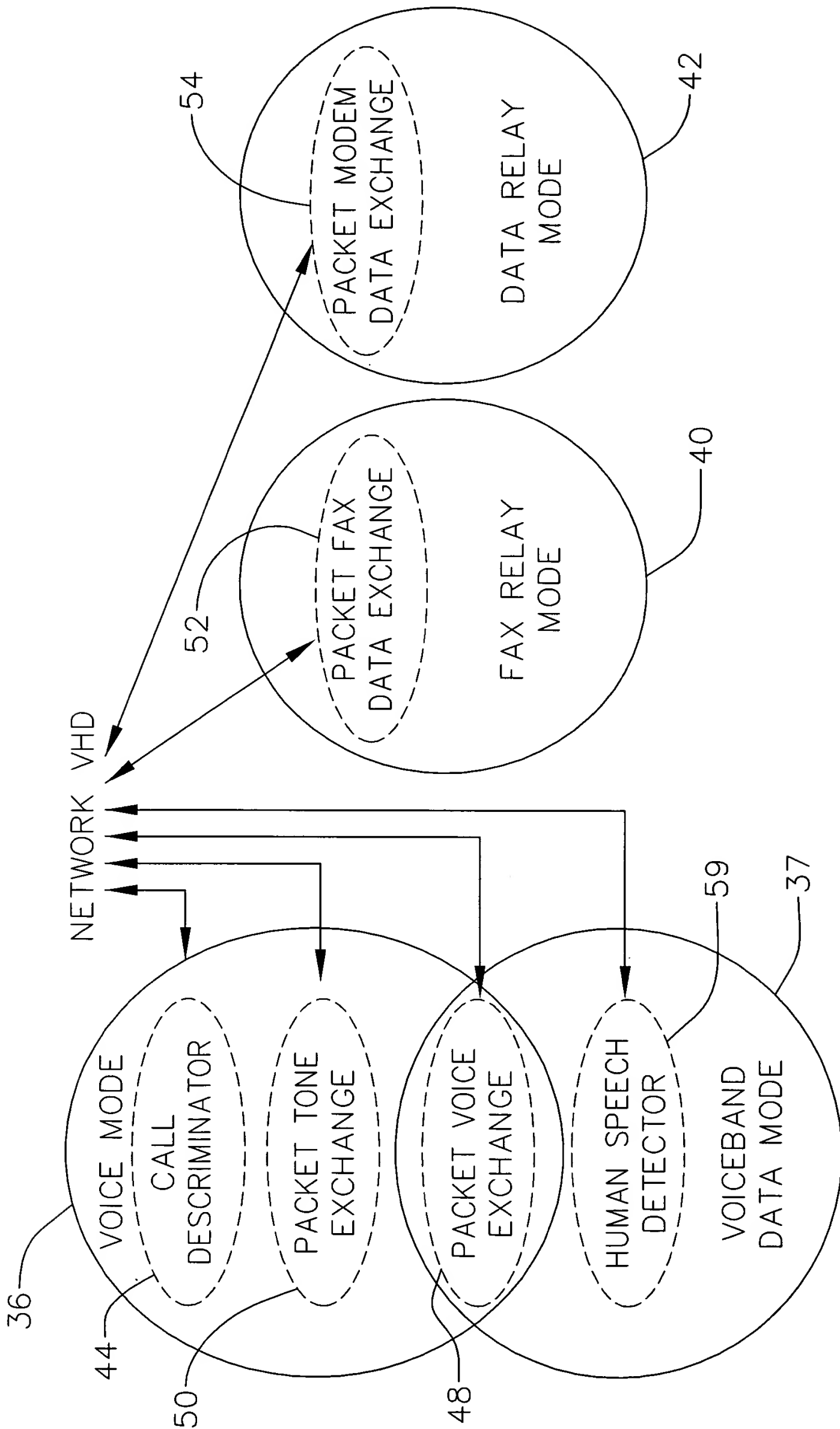




FIG. 5

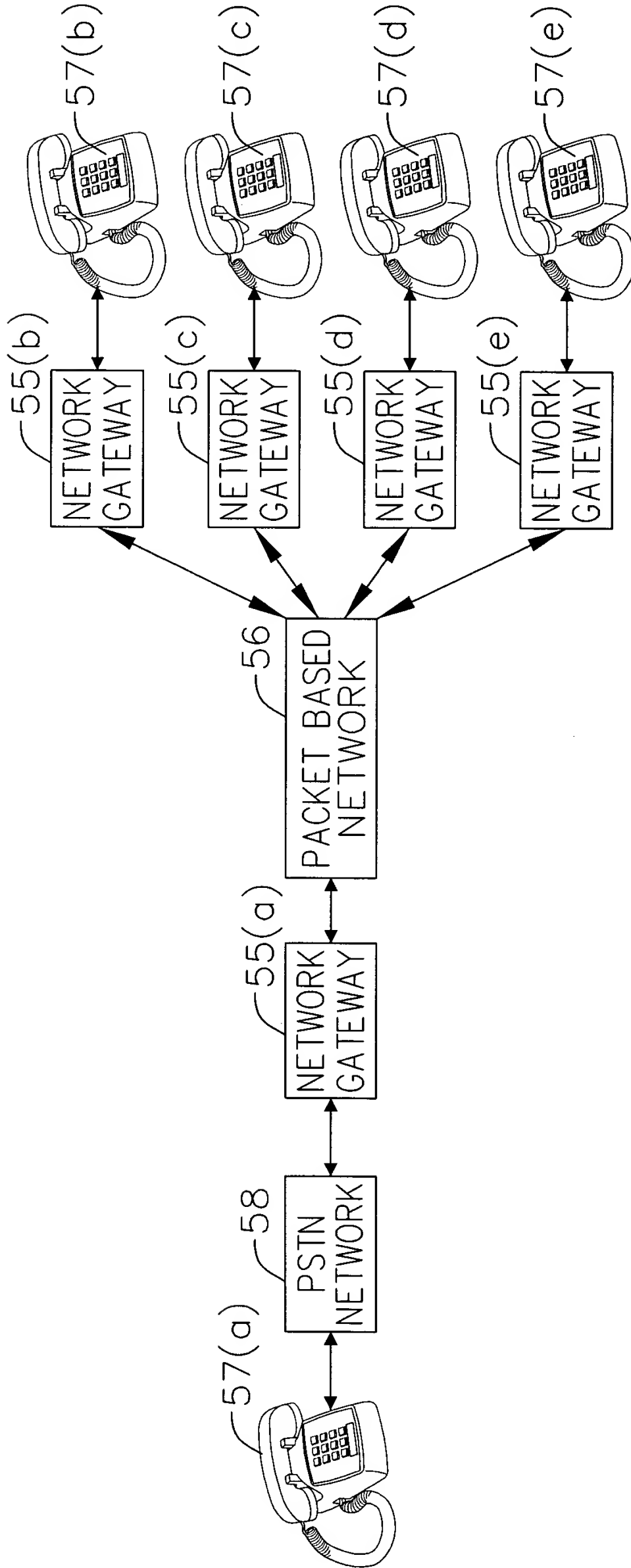


FIG. 6

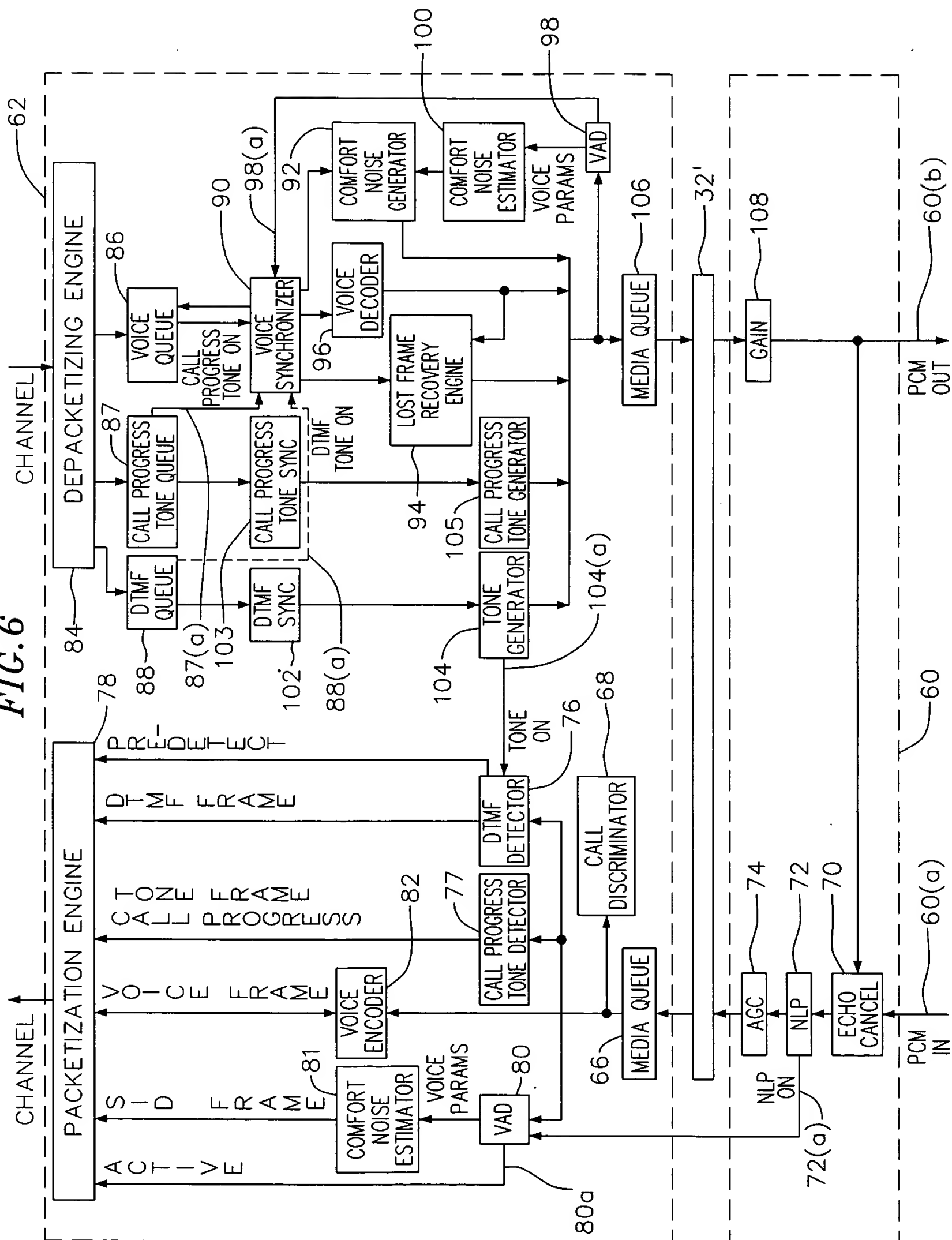


FIG. 8A

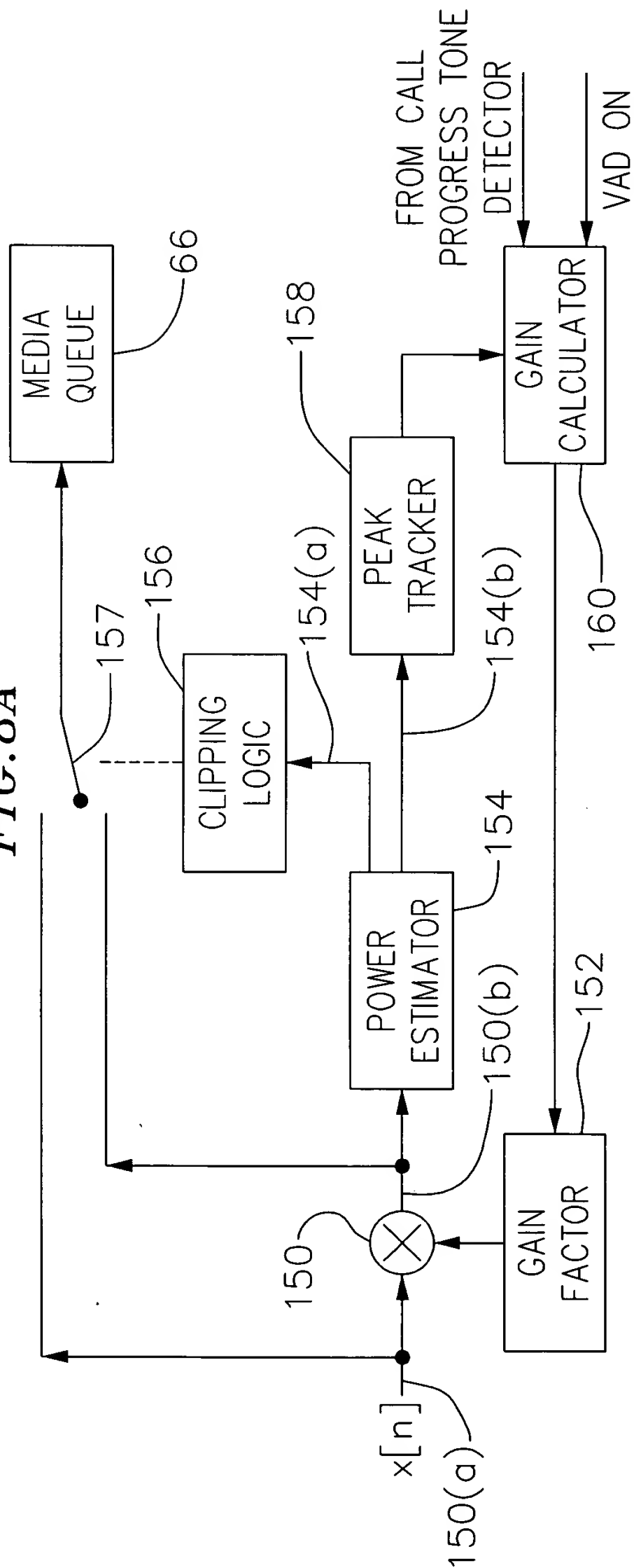


FIG. 8B

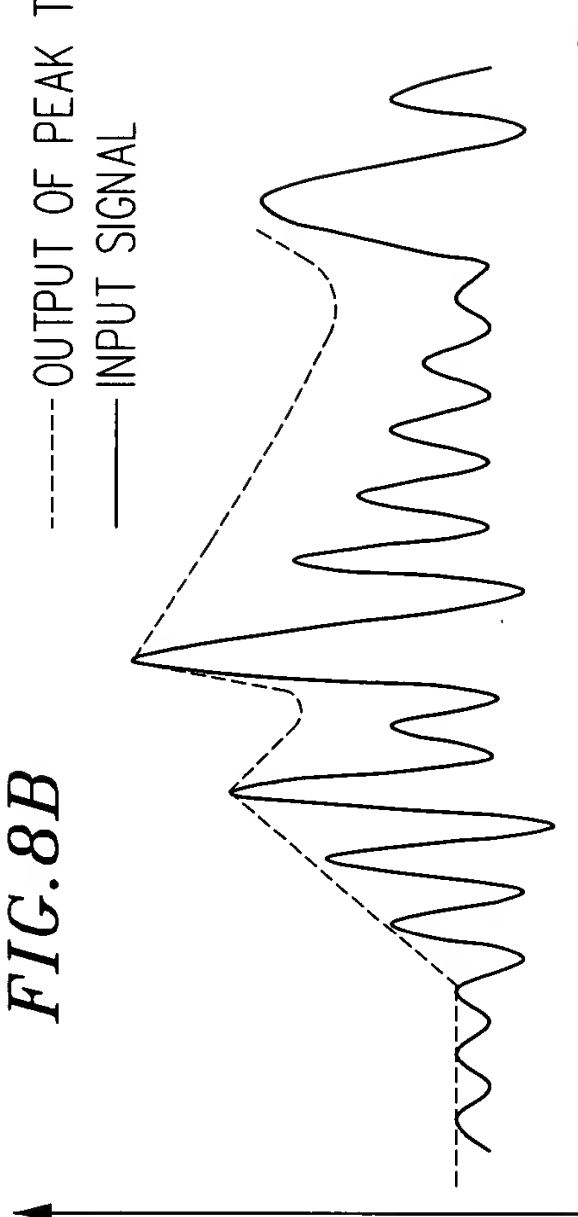
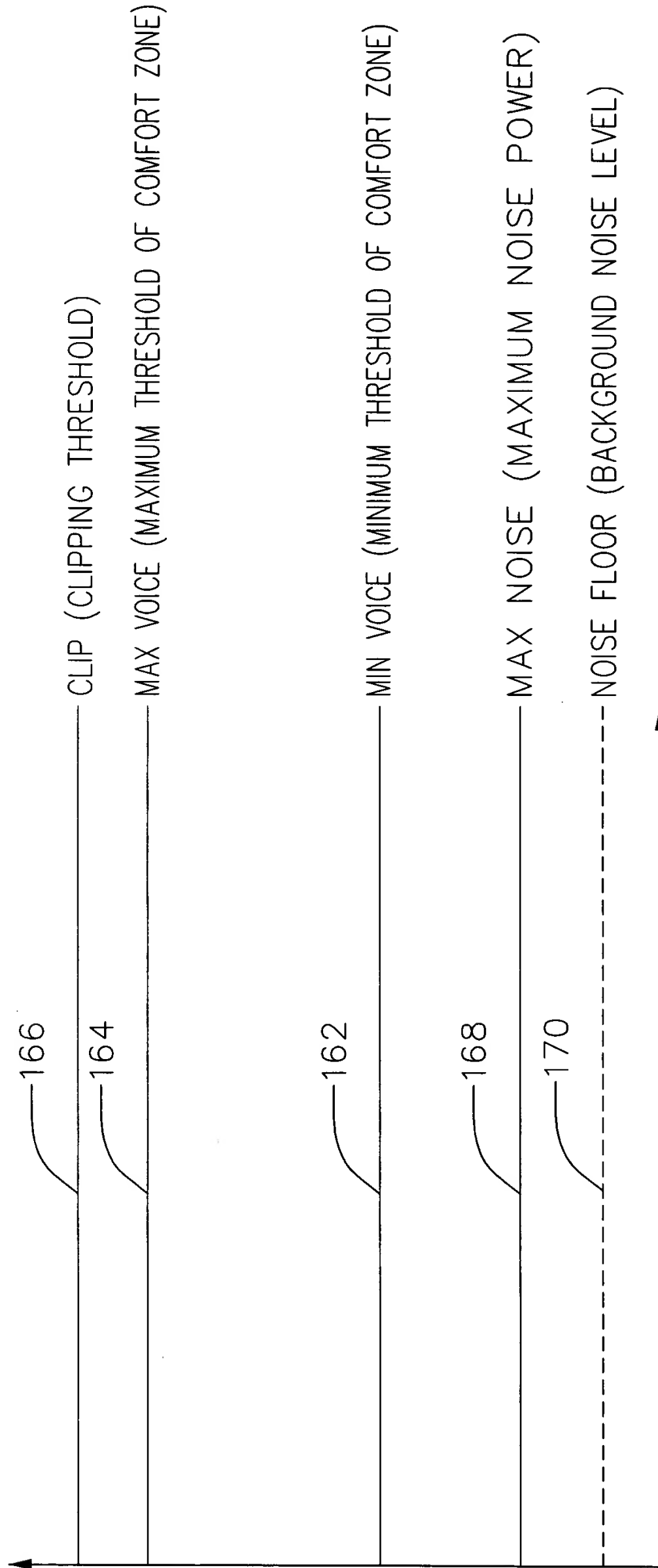




FIG. 9



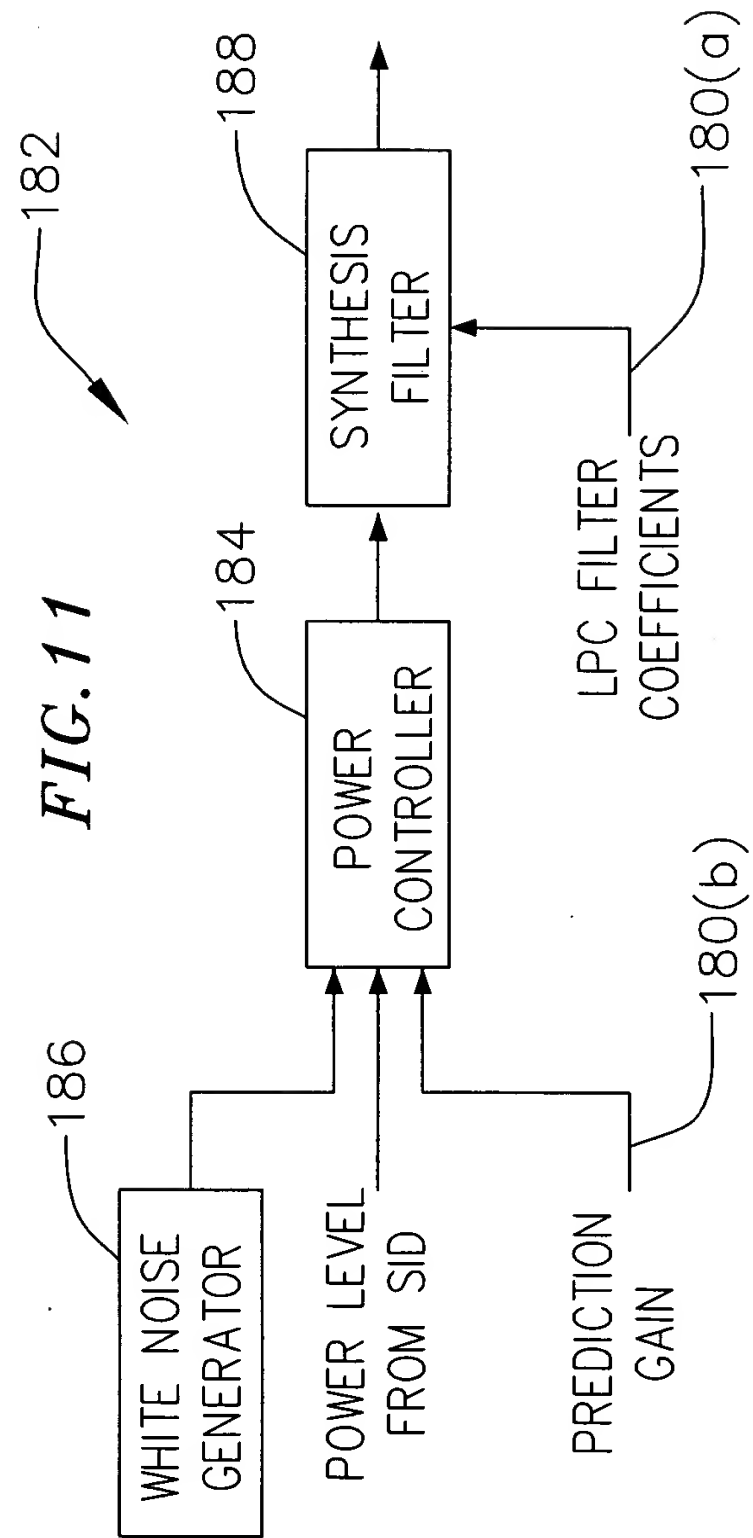
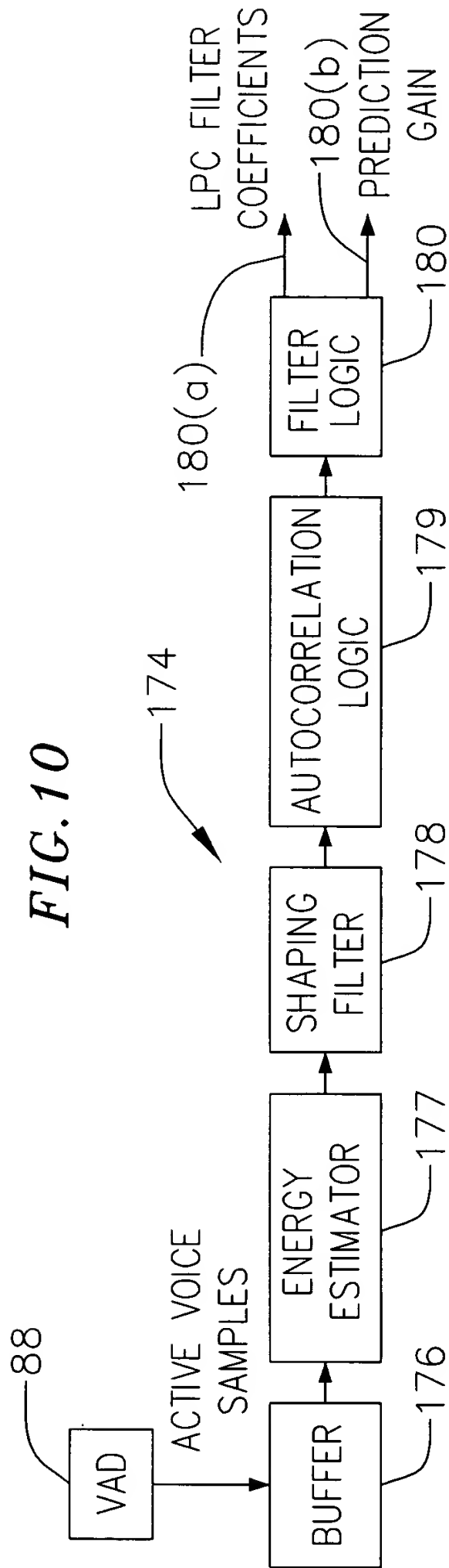




FIG. 12

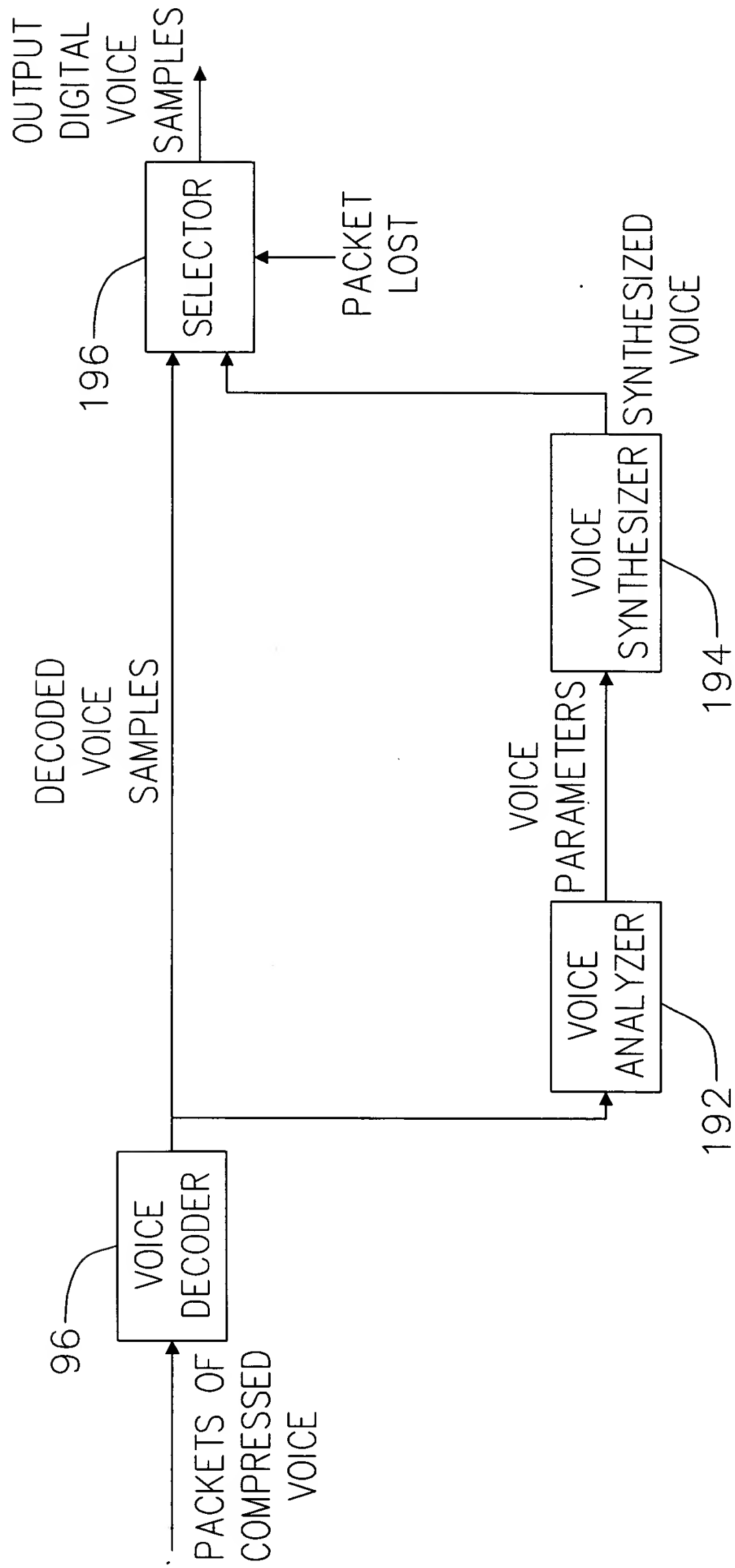




FIG. 13A

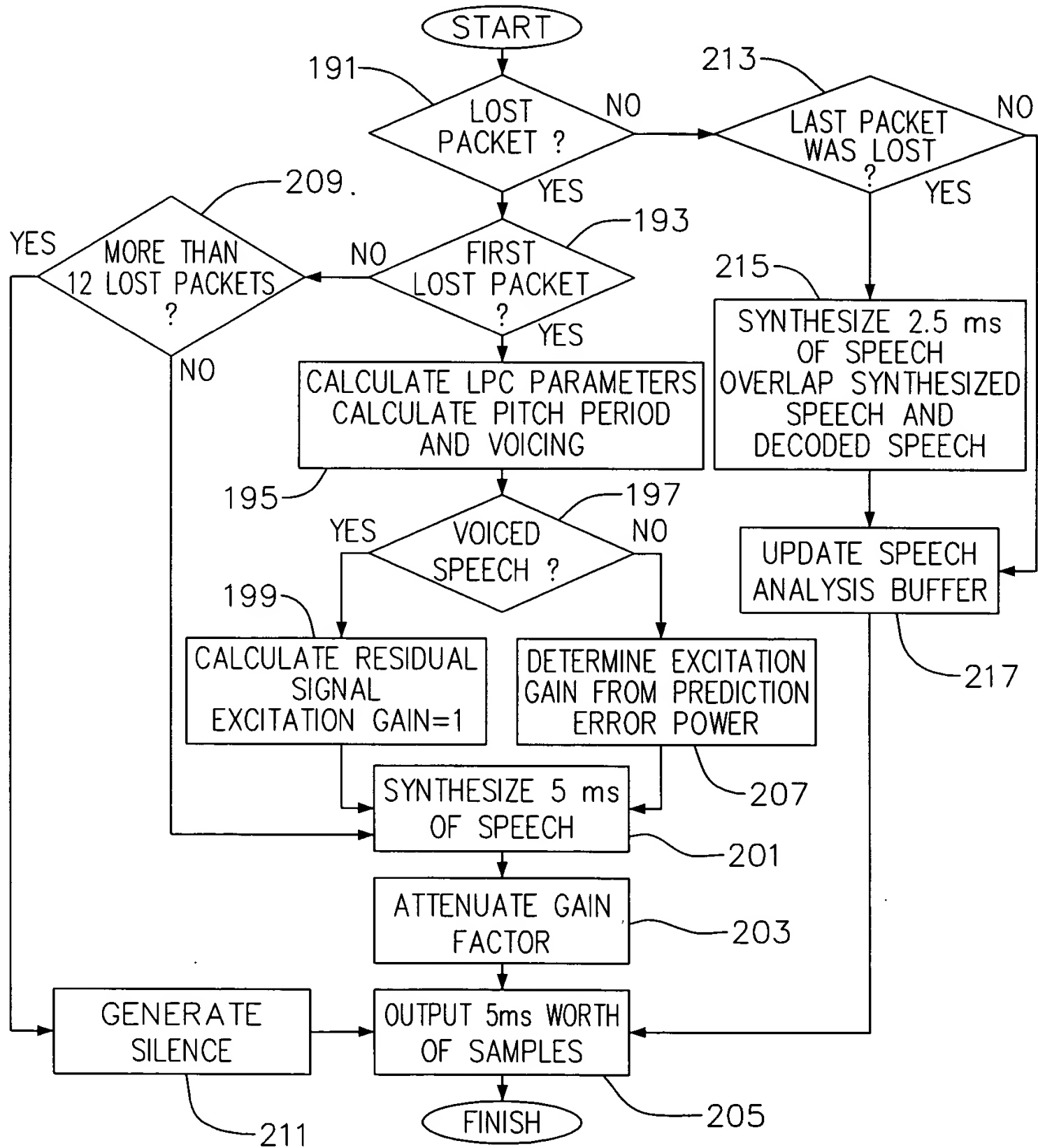




FIG. 13B

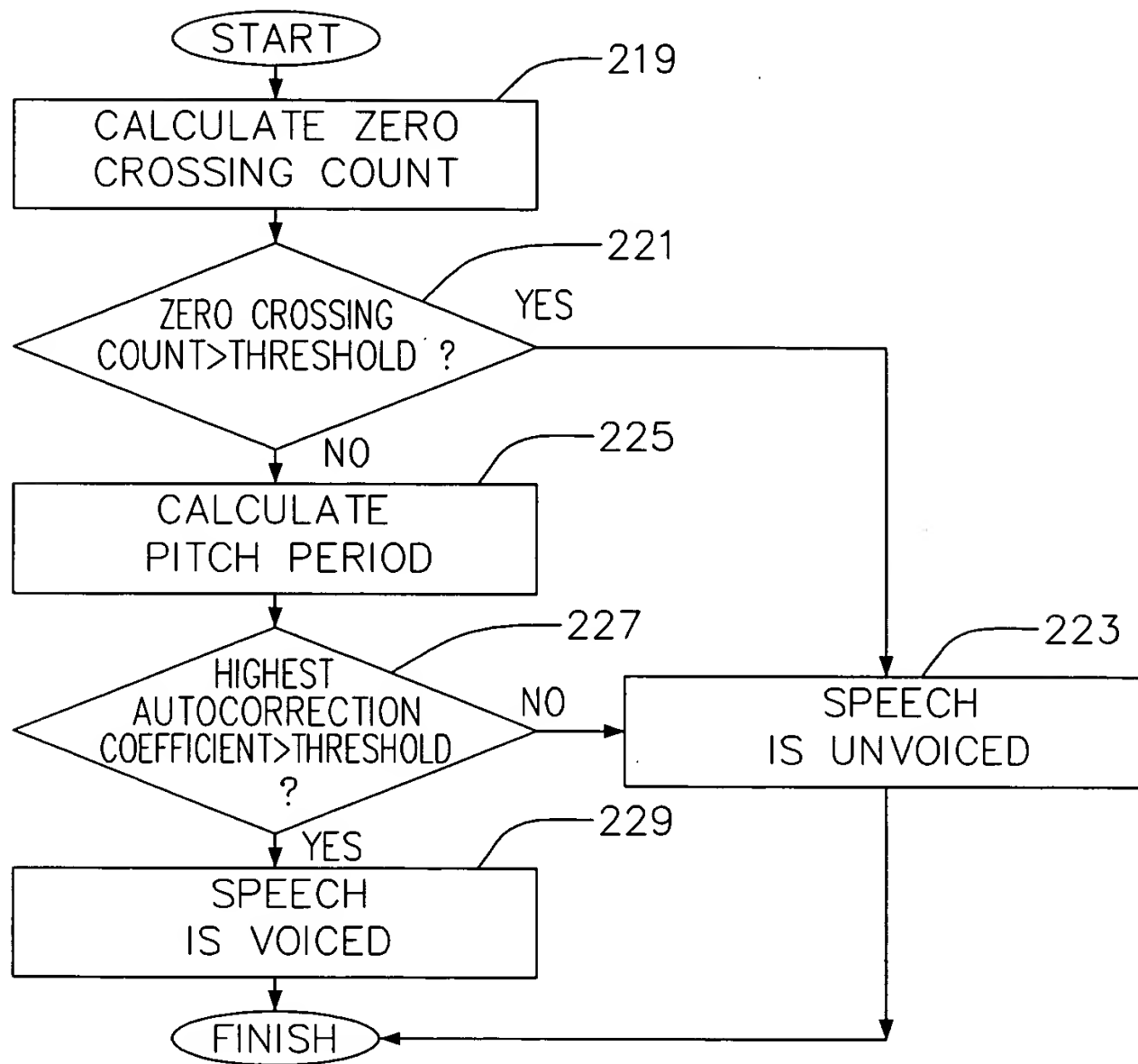




FIG. 13C

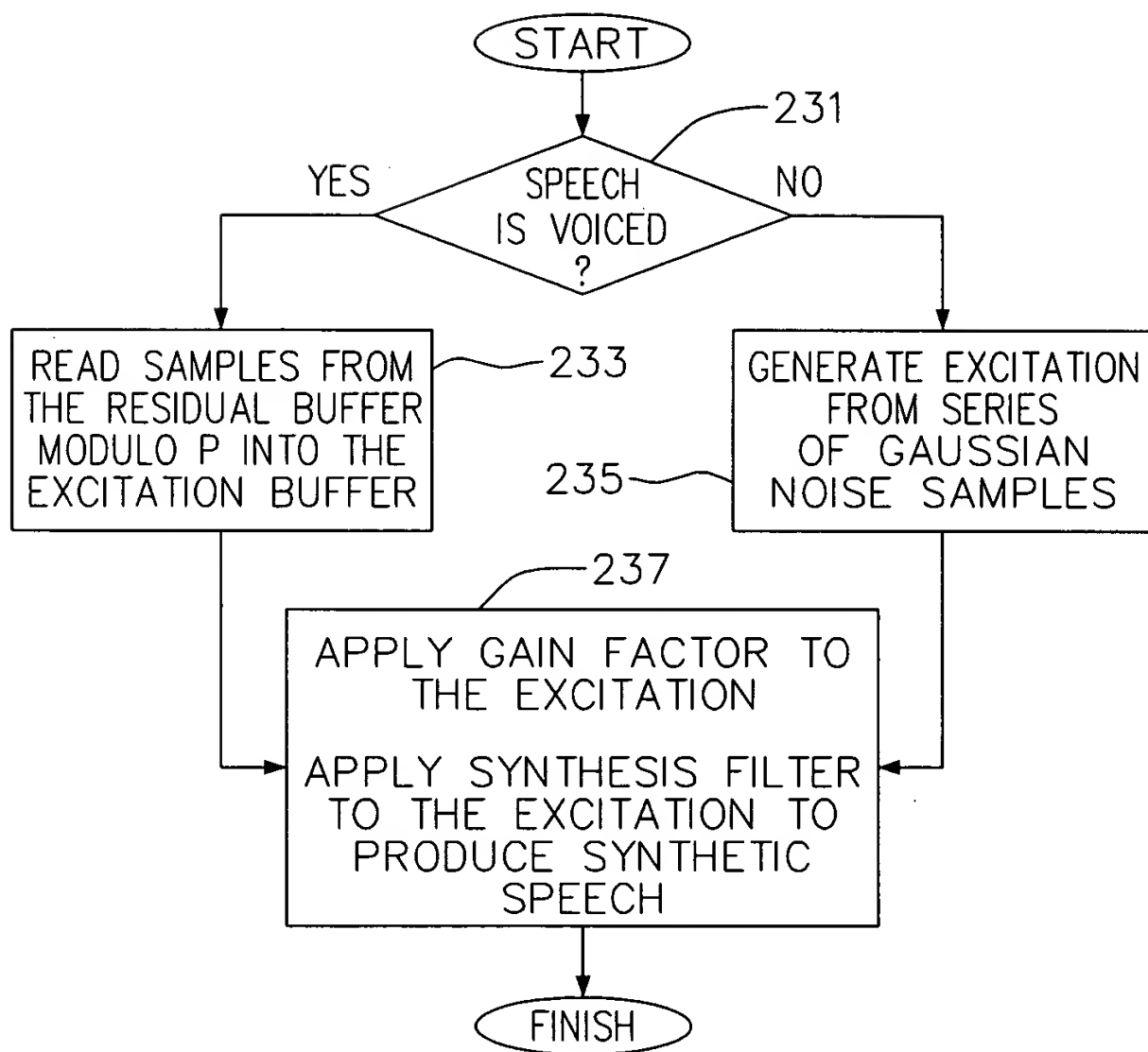




FIG. 14

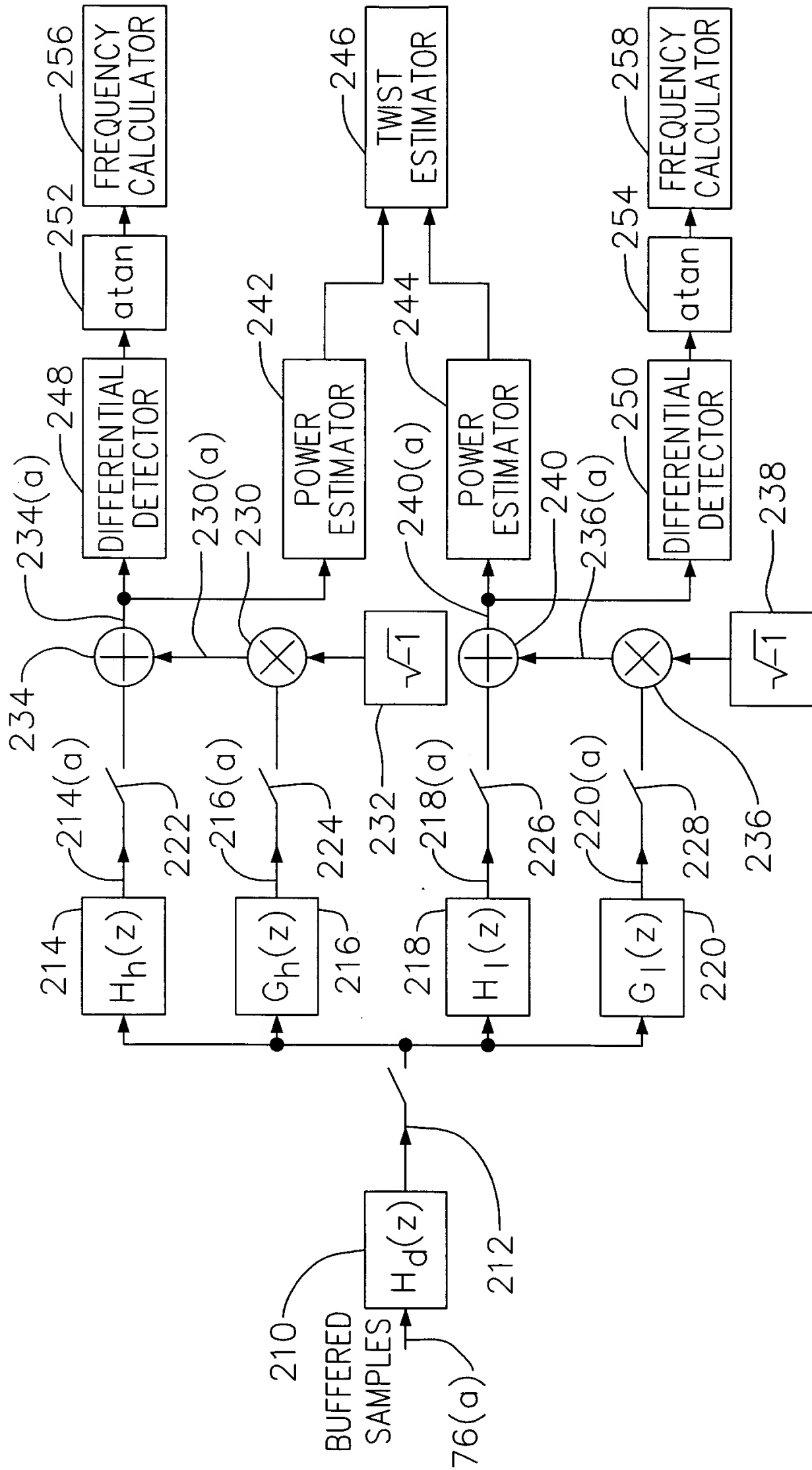




FIG. 14A

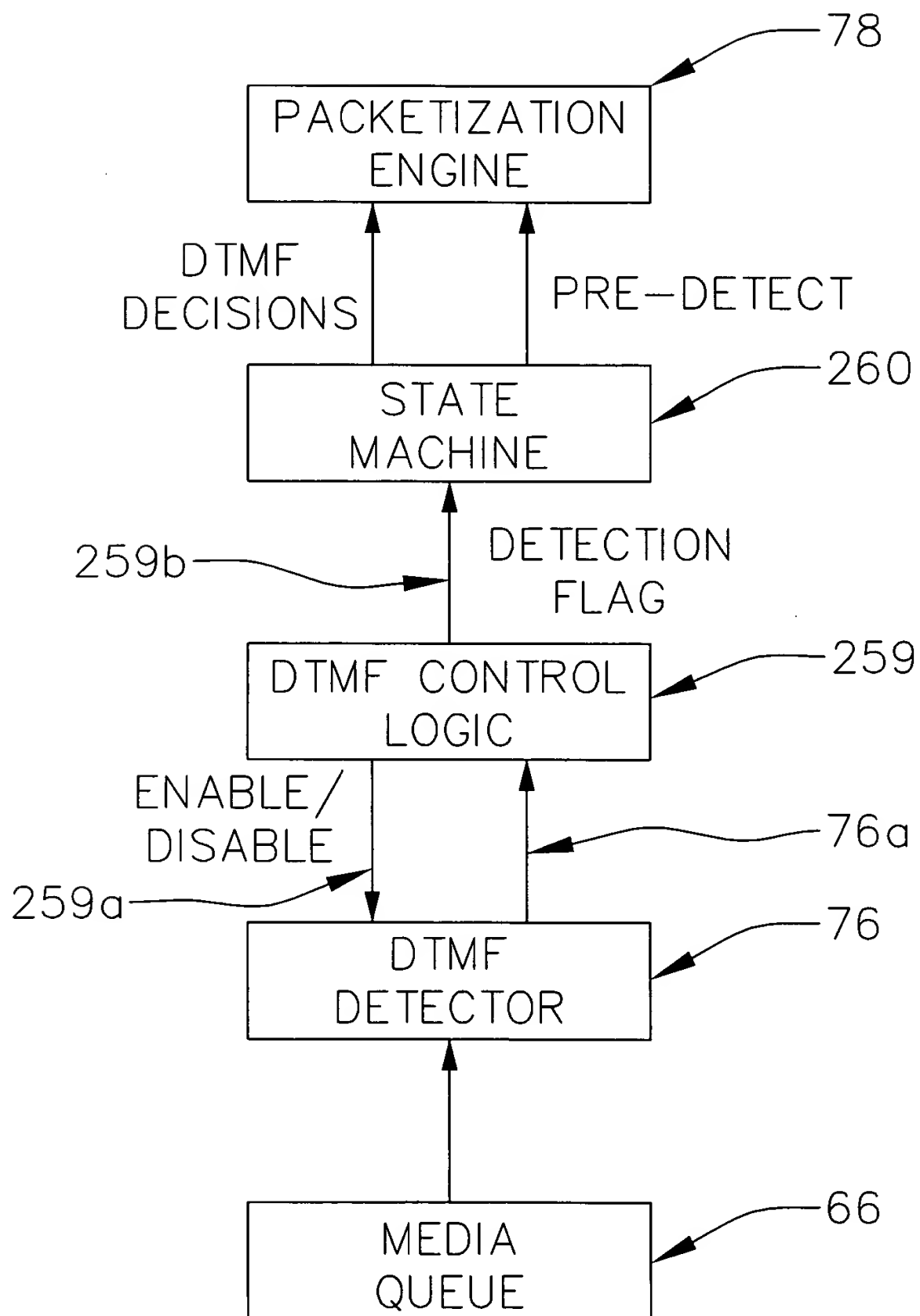
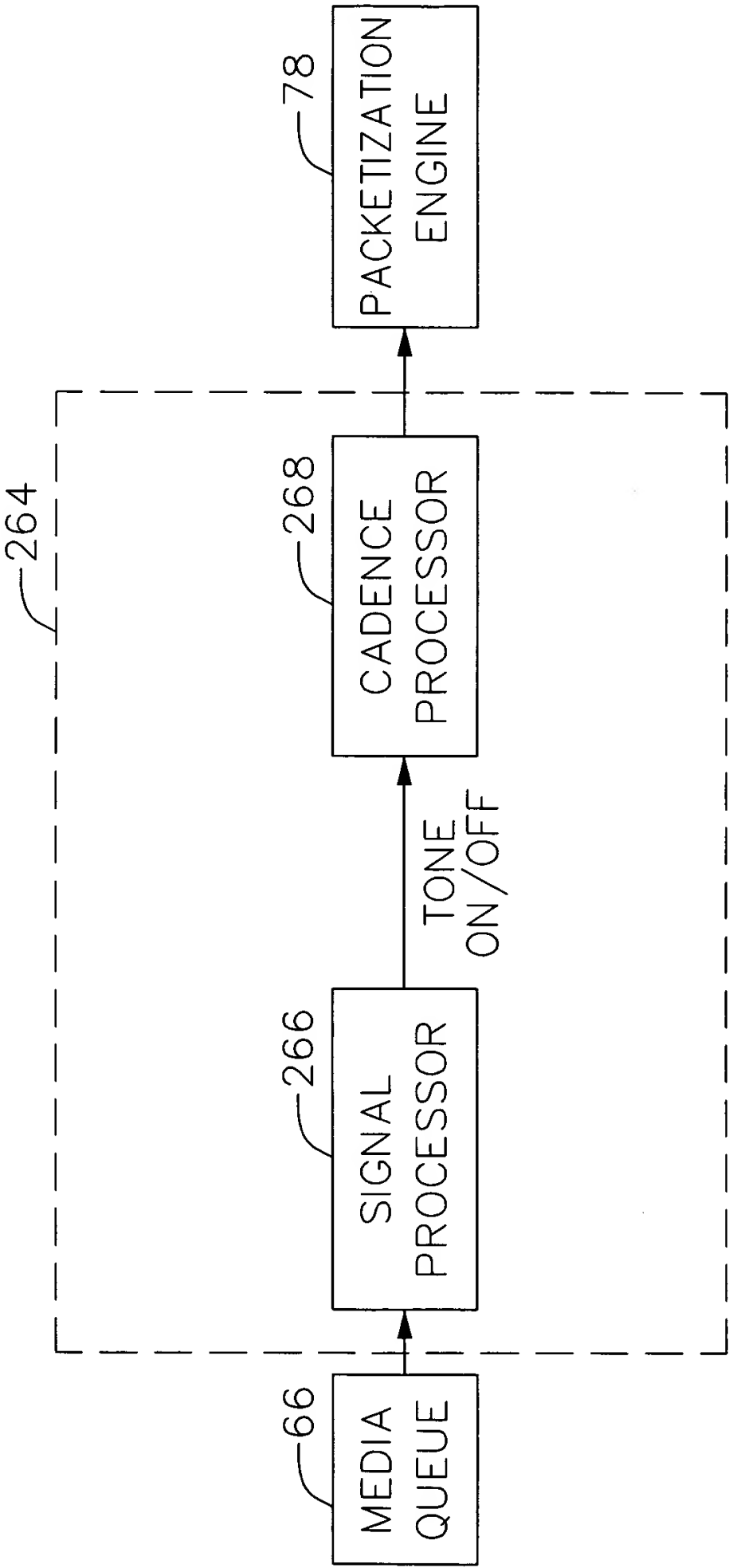




FIG. 15



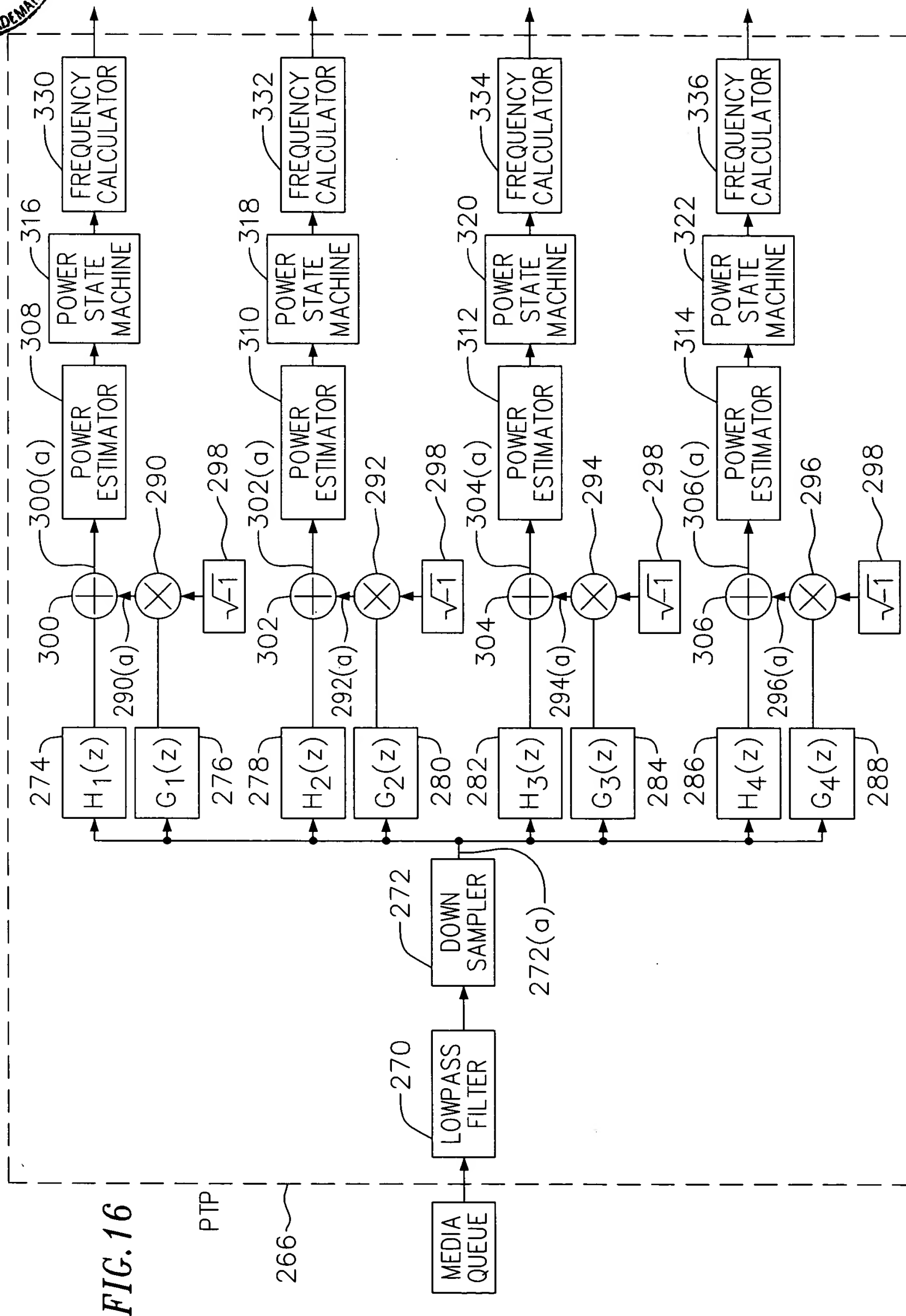




FIG. 17

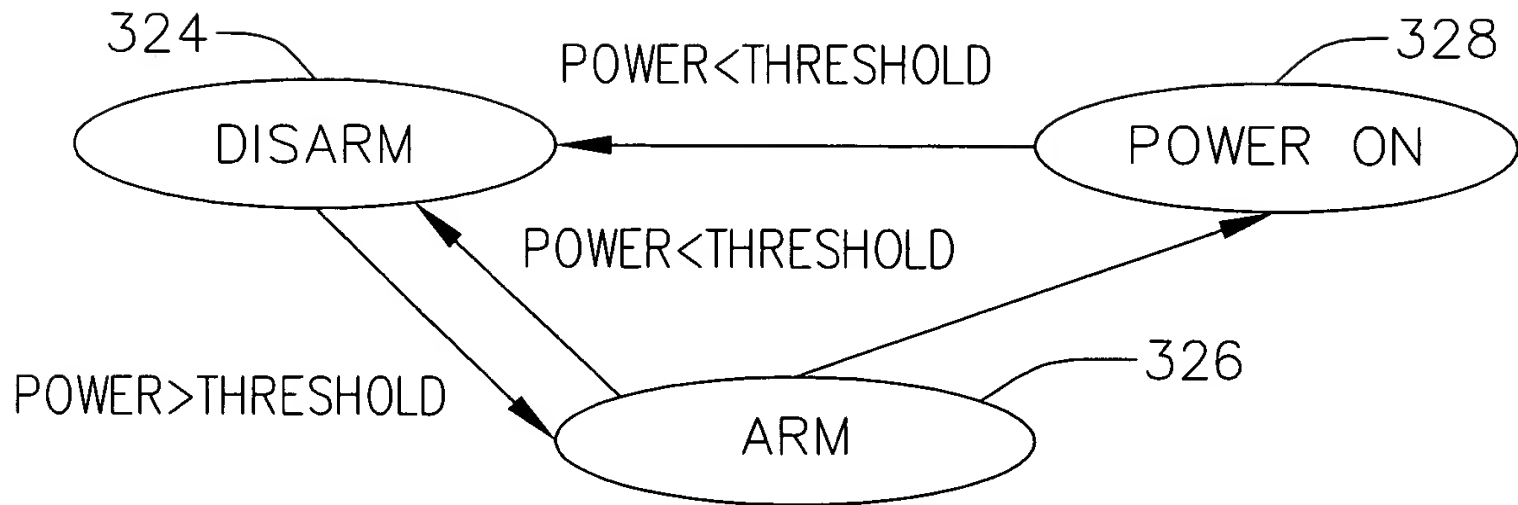


FIG. 18

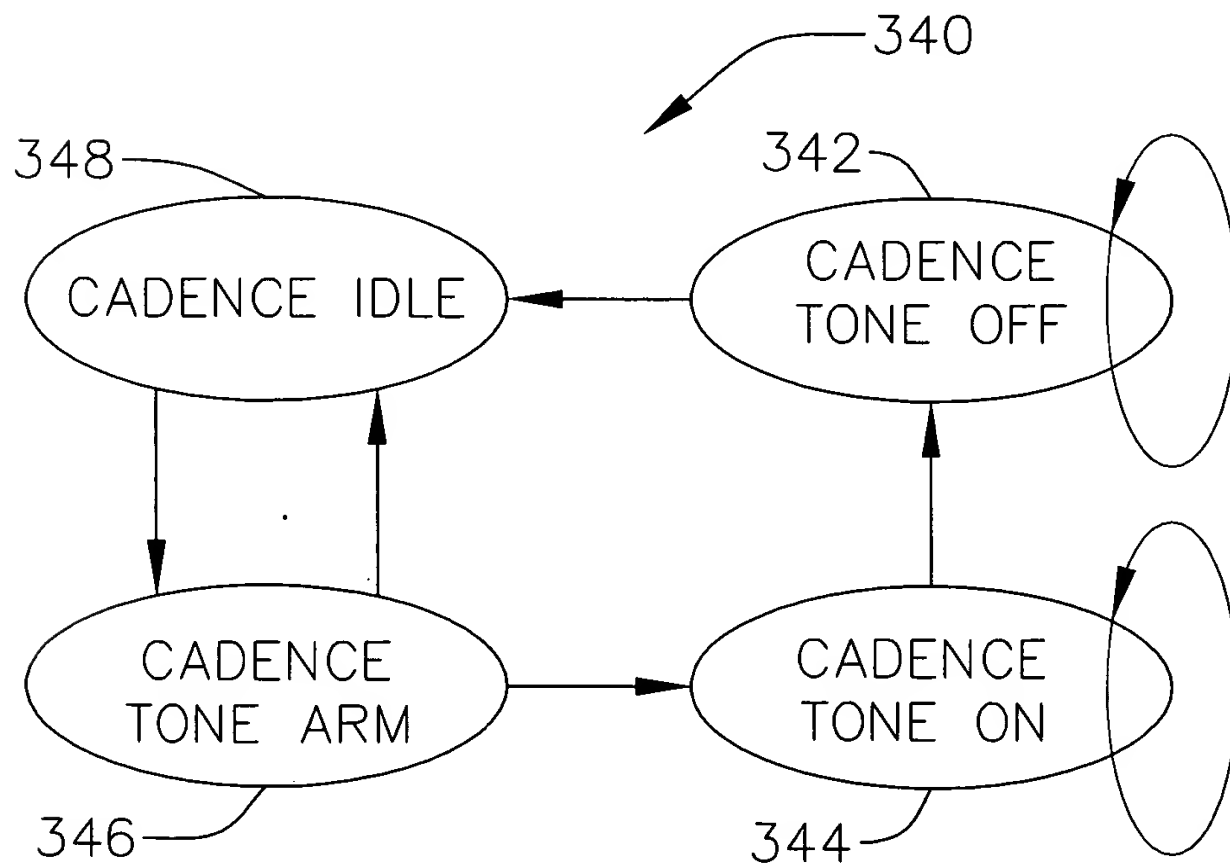




FIG. 18A

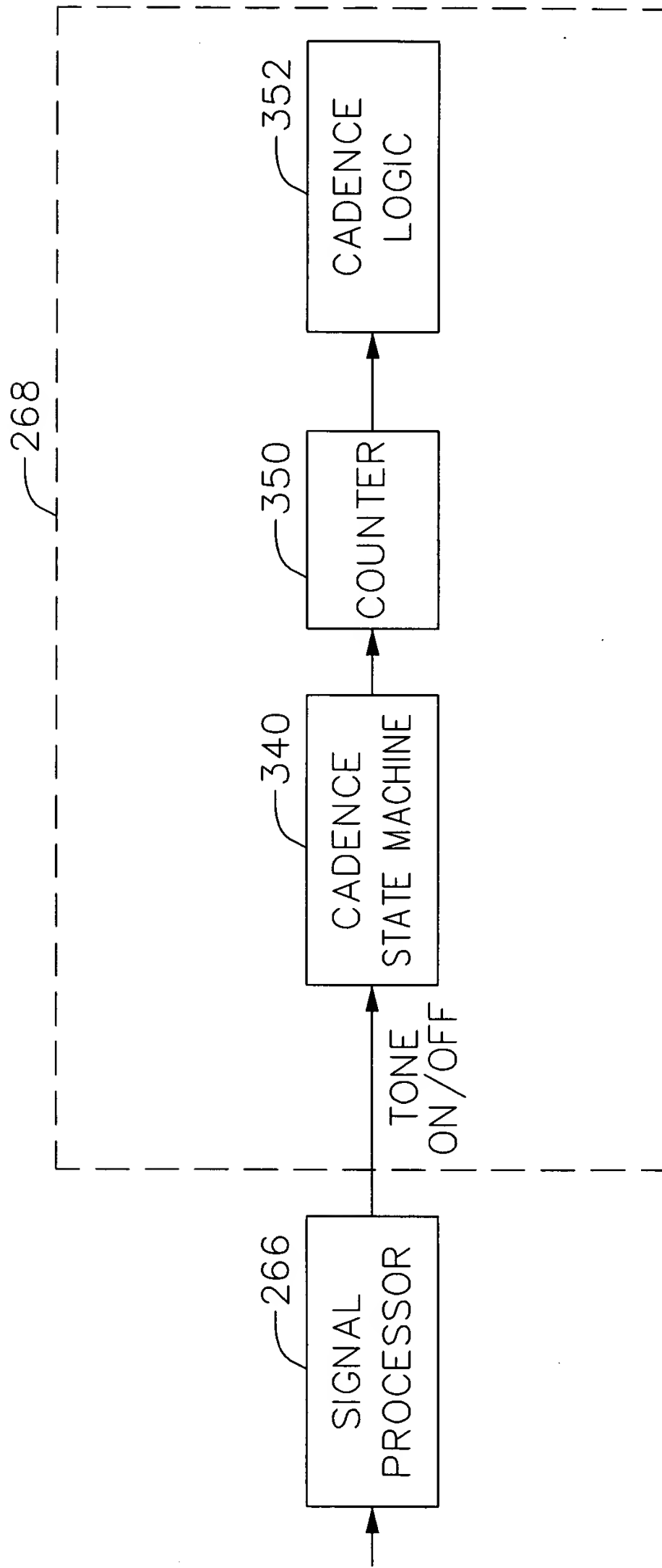




FIG. 19

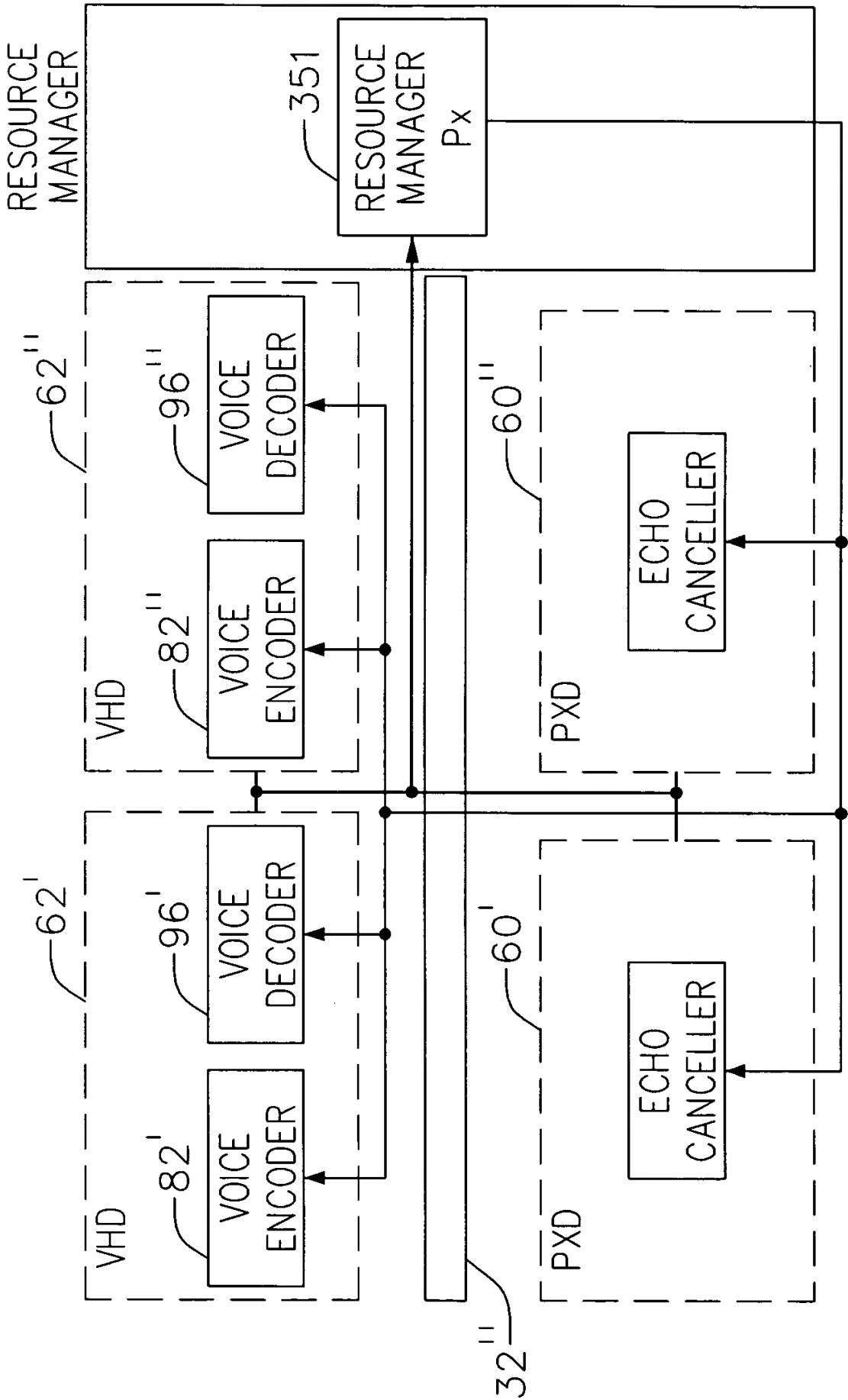




FIG. 20

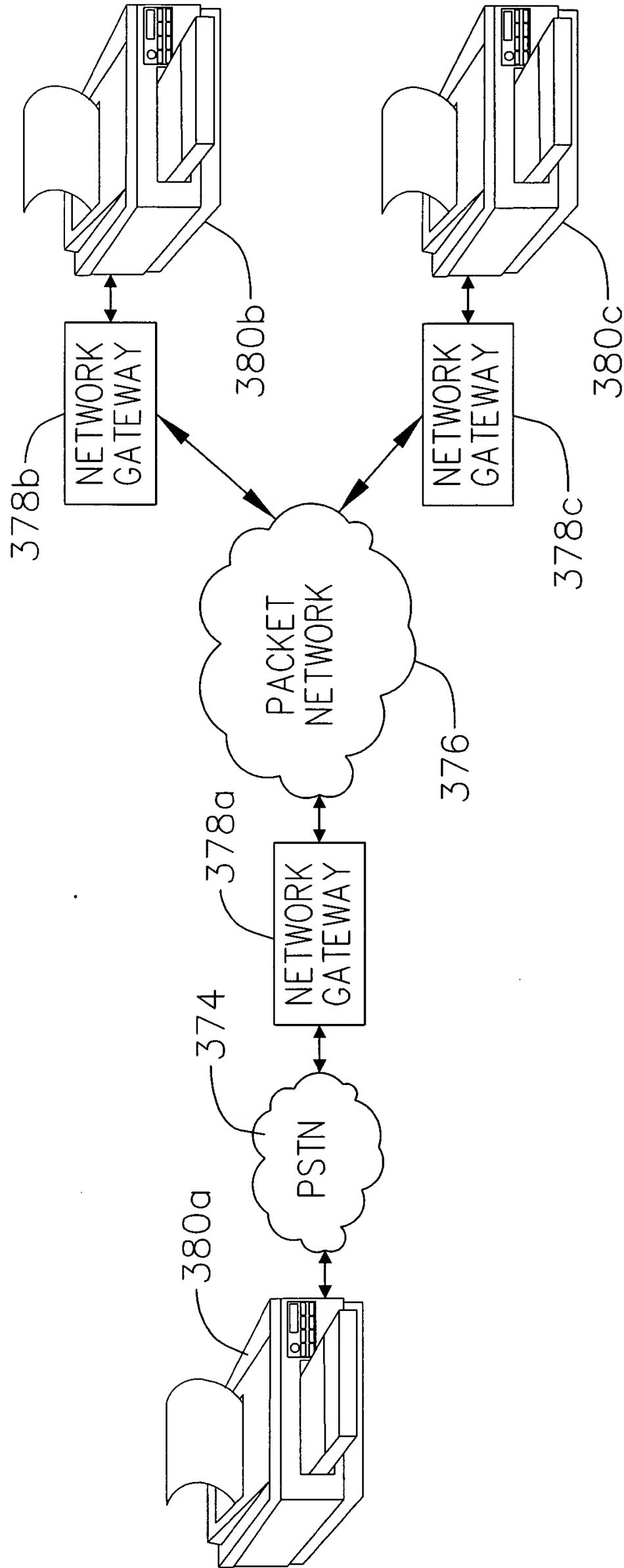


FIG. 21

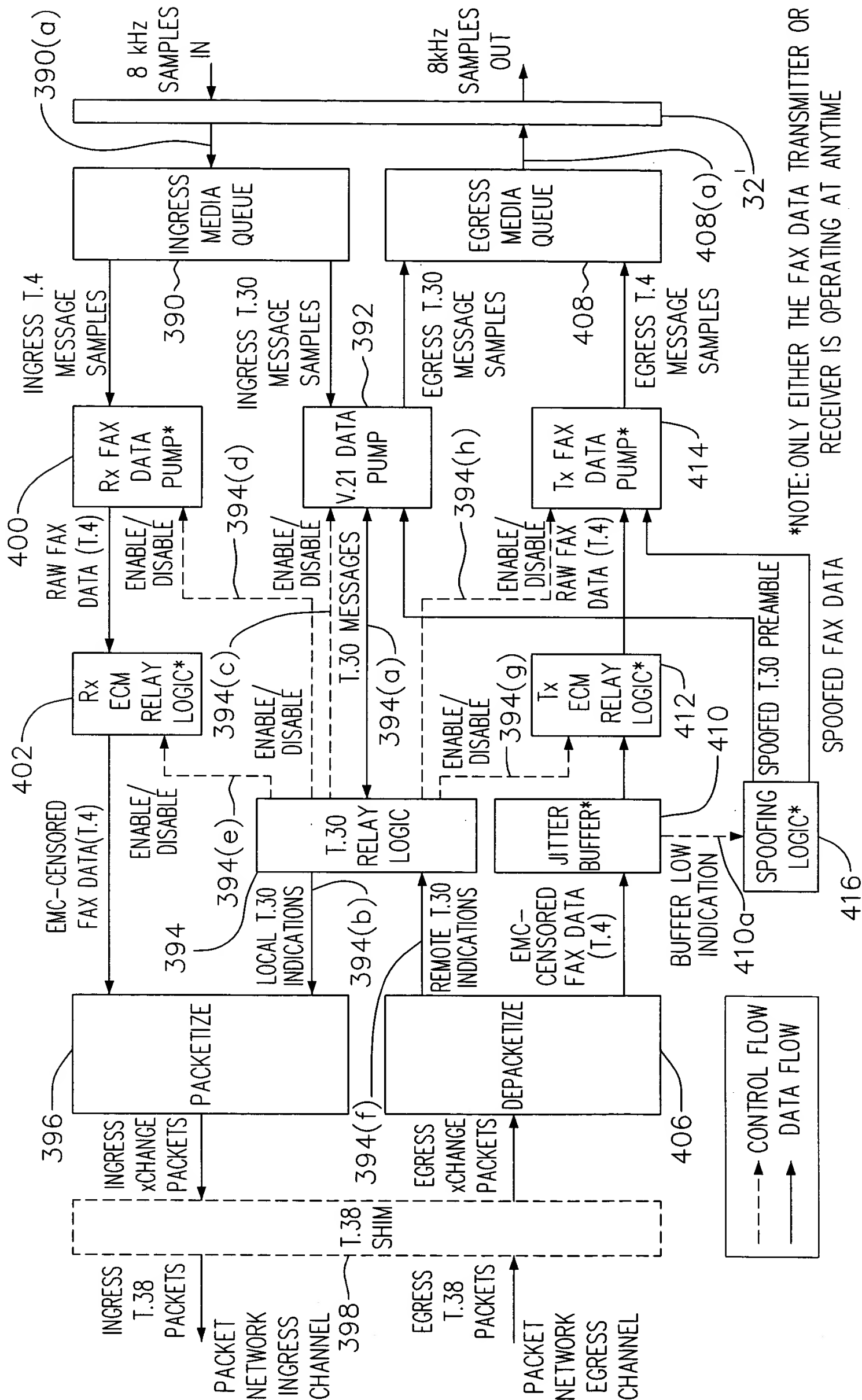




FIG. 22

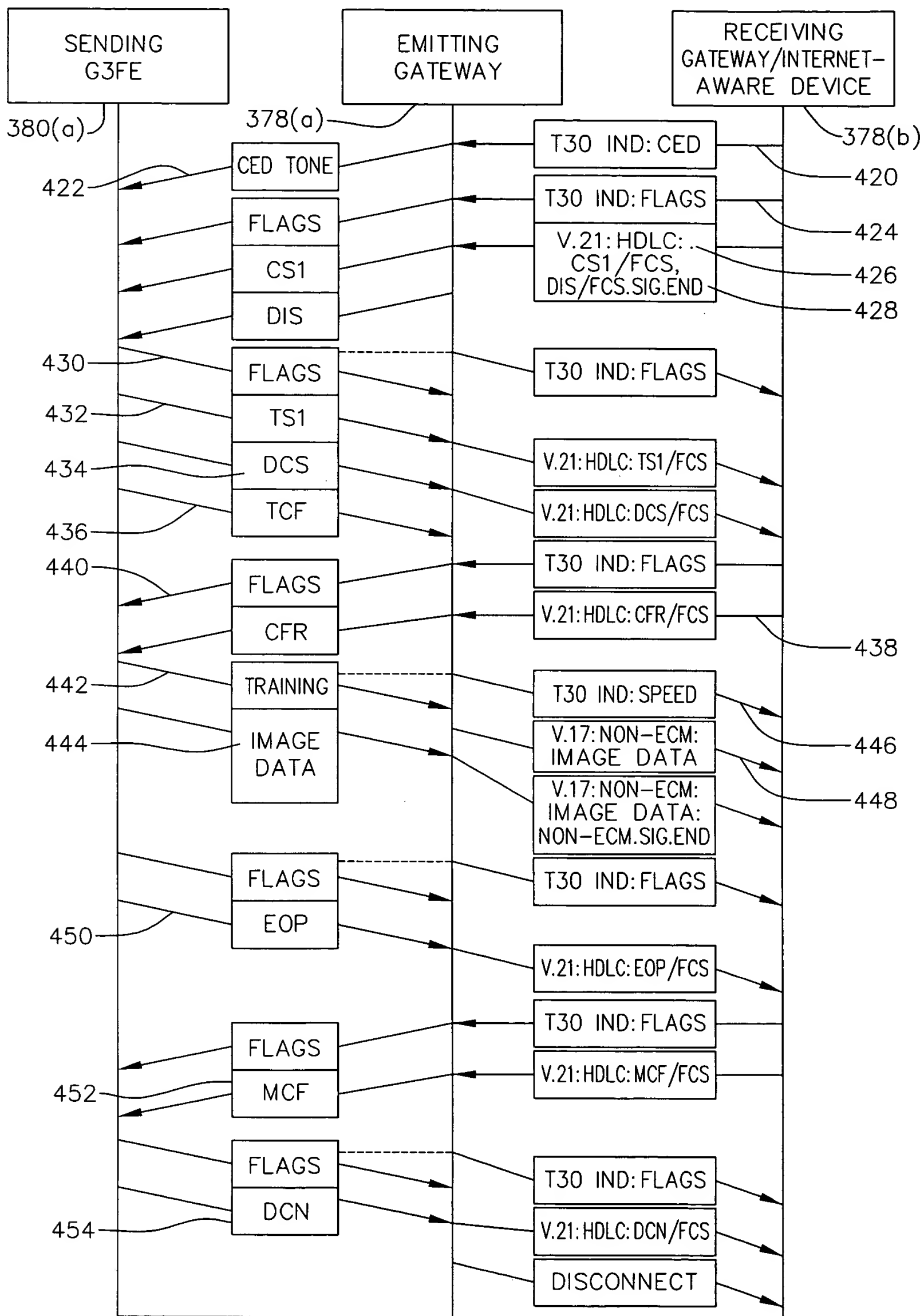




FIG. 23

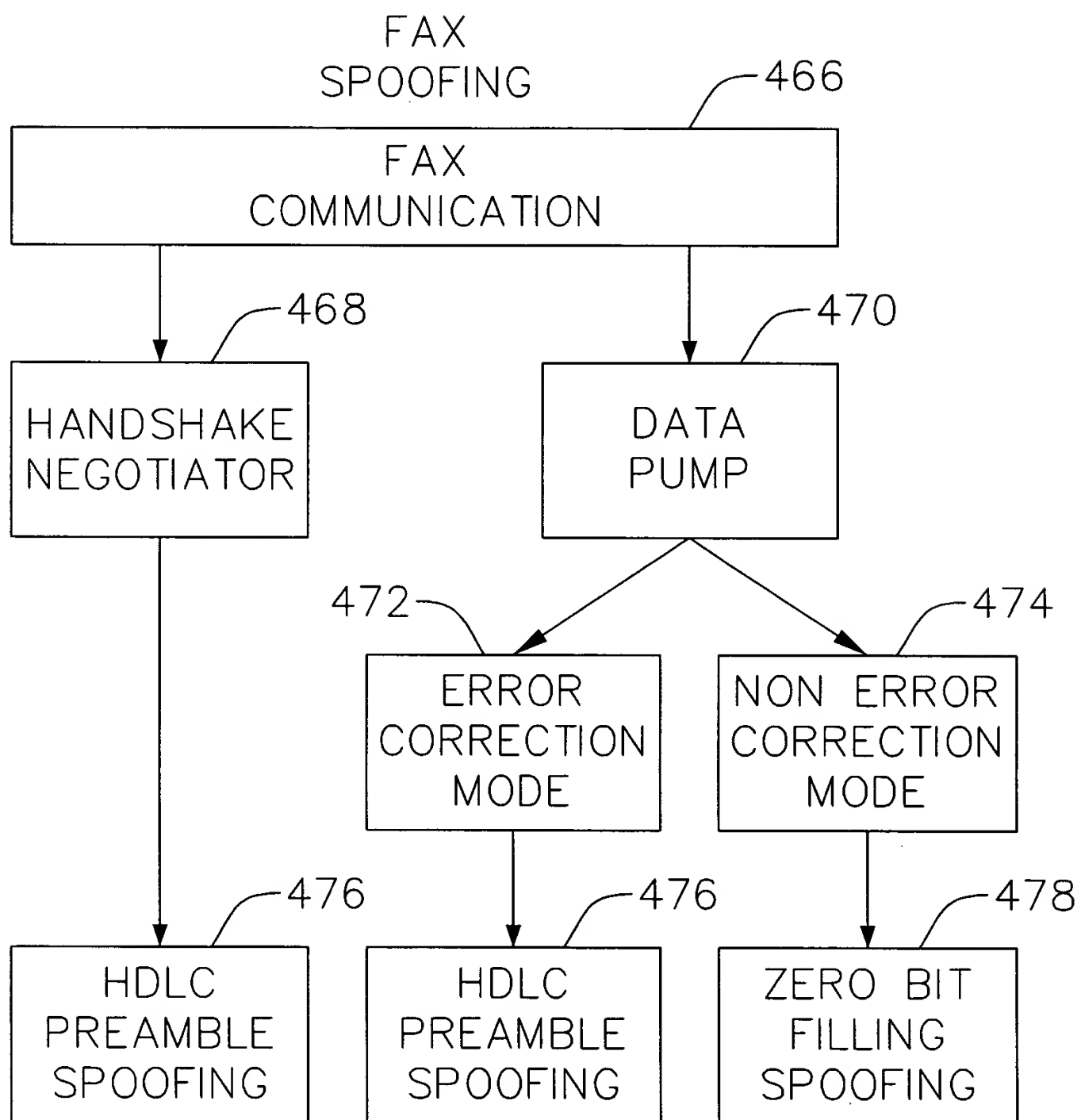
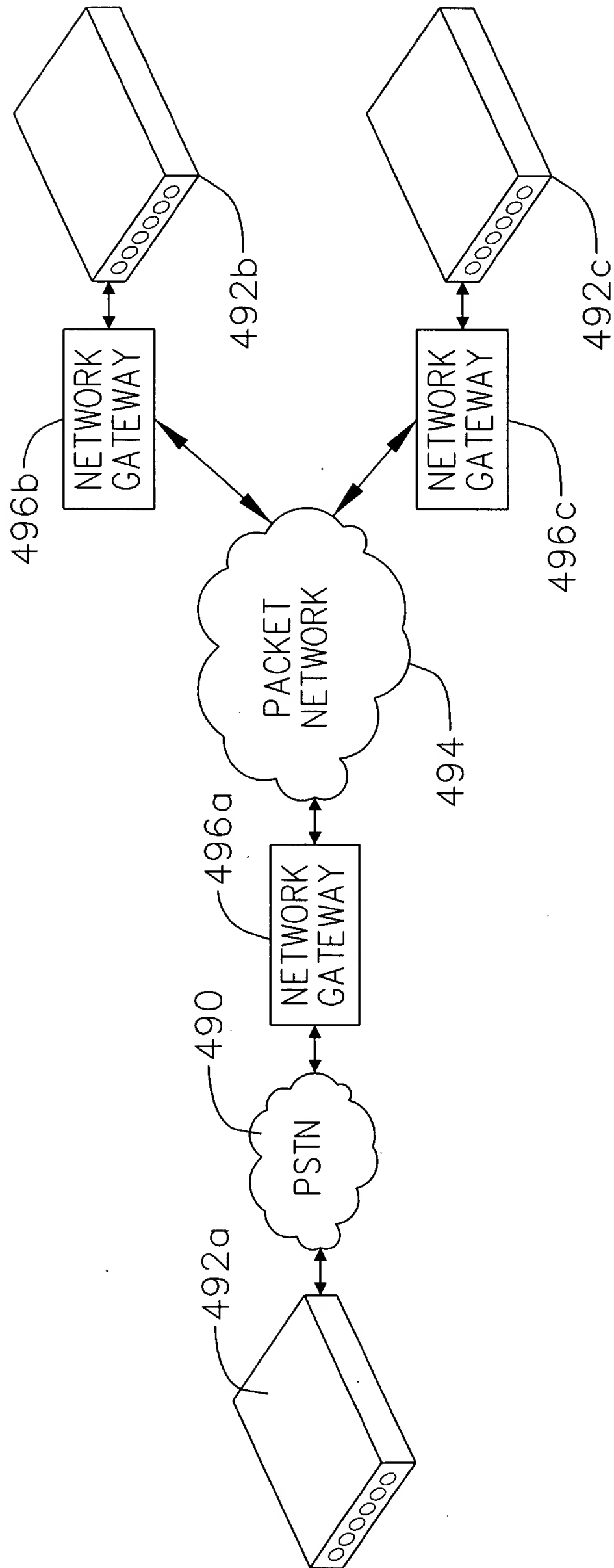




FIG. 24



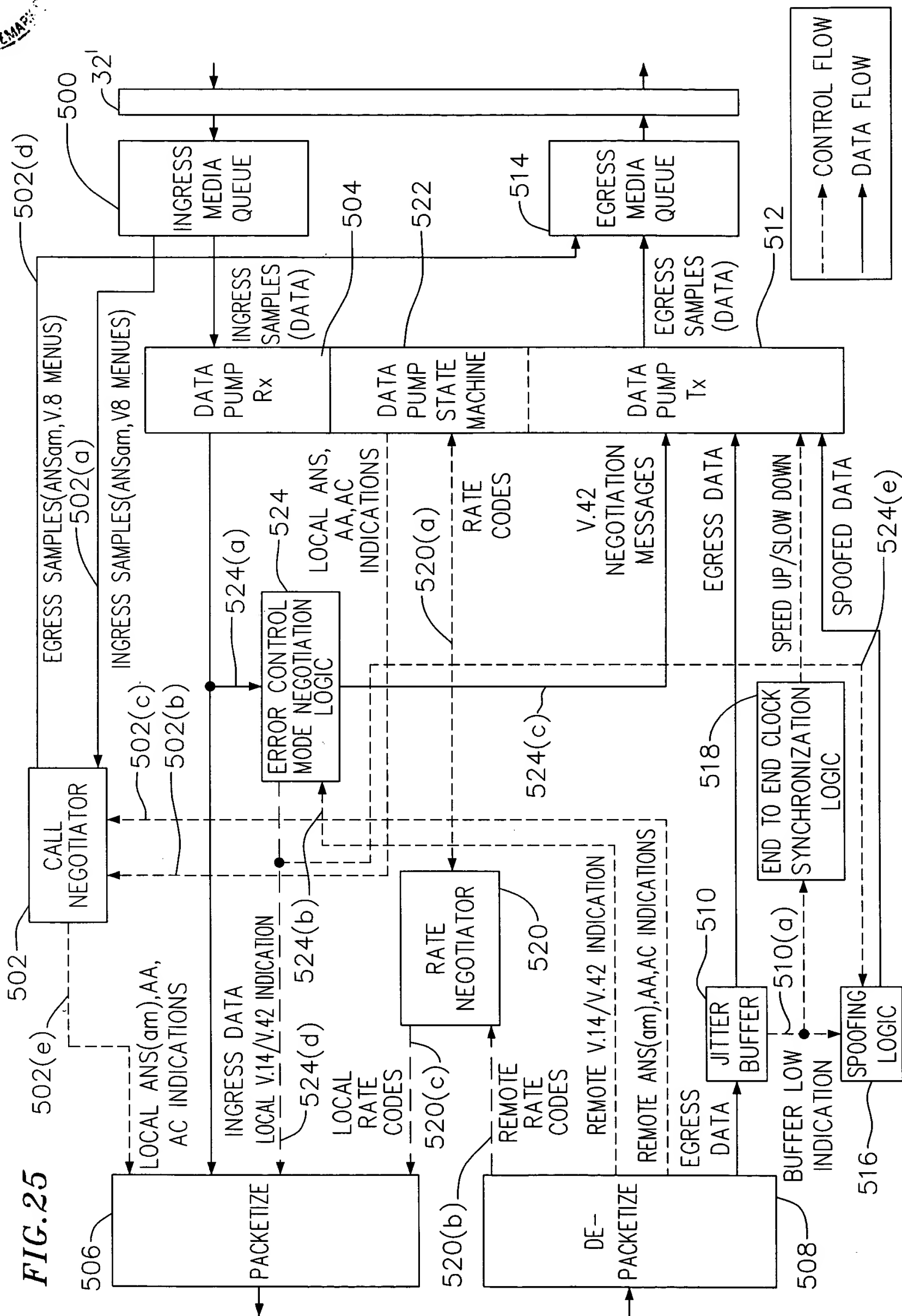


FIG. 26

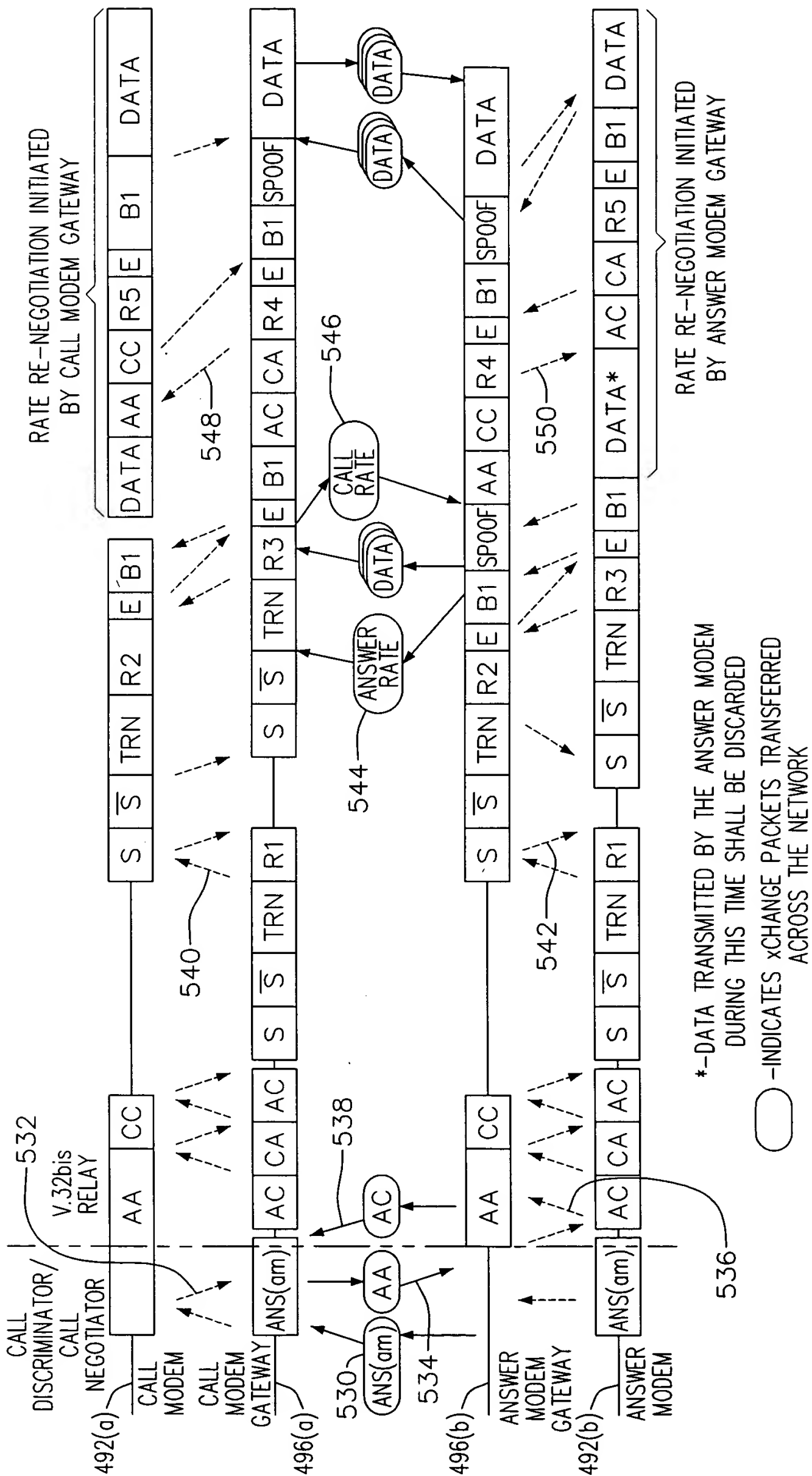


Figure 1 illustrates the sequence of operations for a V.32bis relay. The diagram is divided into three main sections: 492(a) Call Negotiation, 496(a) Gateway, and 496(b) Answer Modem.

492(a) Call Negotiation: A CALL MODEM (552) negotiates with a V.32bis RELAY (554). The relay sends a sequence of packets: S, S-bar, TRN, R2, E, B1, DATA. The sequence is labeled 570.

496(a) Gateway: The GATEWAY (552) receives packets from the relay (562) and the answer modem (552). The gateway sends packets to the relay (566) and the answer modem (560). The answer modem sends packets to the gateway (556). The sequence of packets from the relay is labeled 562, and the sequence from the answer modem is labeled 556.

496(b) Answer Modem: The ANSWER MODEM GATEWAY (558) receives packets from the answer modem (558) and the relay (564). The gateway sends packets to the answer modem (568) and the relay (574). The relay sends packets to the gateway (576). The sequence of packets from the answer modem is labeled 558, and the sequence from the relay is labeled 576.

Legend:

- *-DATA TRANSMITTED BY THE ANSWER MODEM DURING THIS TIME SHALL BE DISCARDED
- INDICATES XCHANGE PACKETS TRANSFERRED ACROSS THE NETWORK

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DURING THIS TIME SHALL BE DISCARDED

--INDICATES xCHANGE PACKETS TRANSFERRED
ACROSS THE NETWORK

FIG. 28

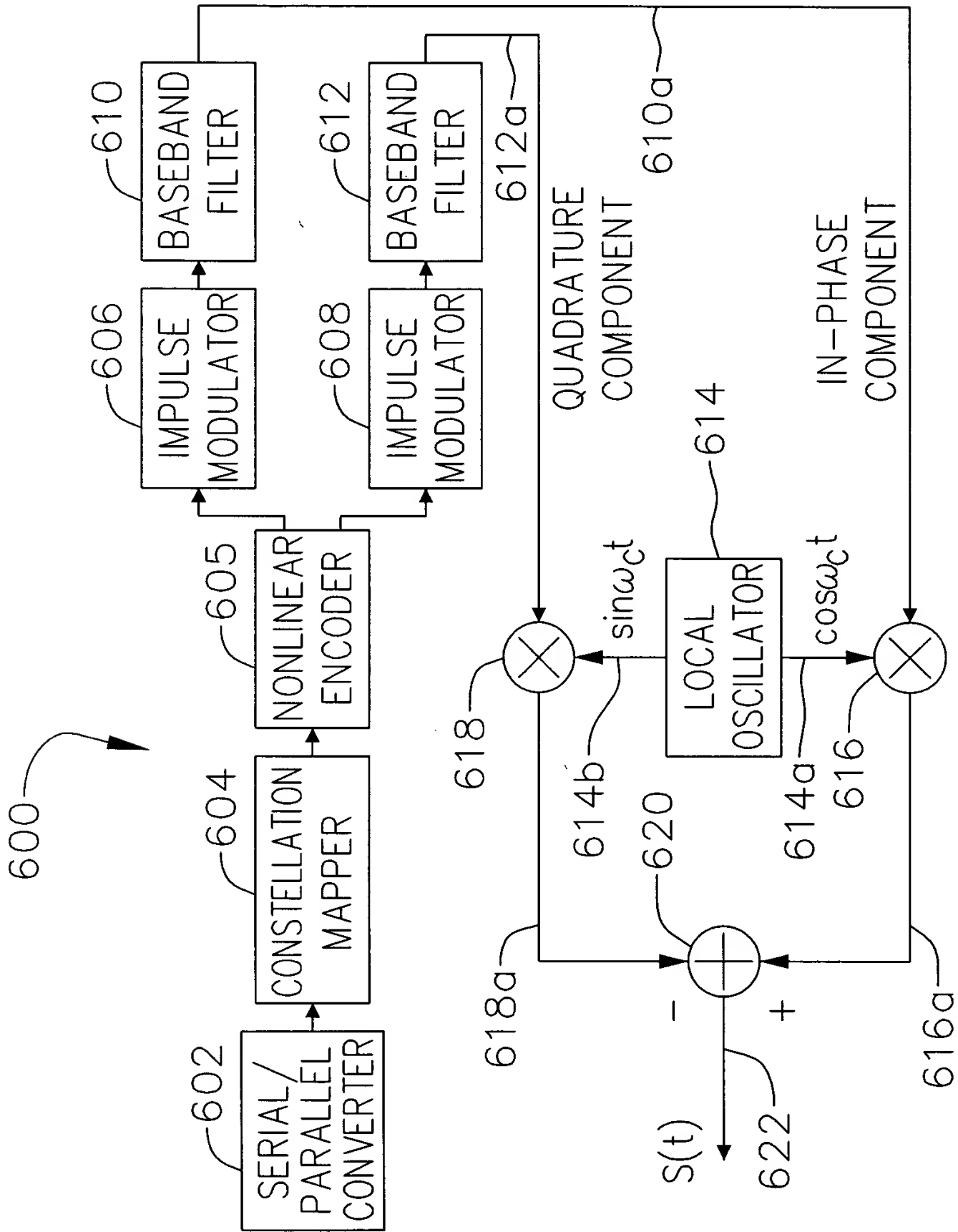


FIG. 6 is a block diagram of a PLL system. The system includes a feedback loop. A "GAIN ADJUSTED SIGNAL" (640) is input to a switch (636(a)). The output of the switch (636(a)) is a signal (670) that is fed into an "UPPER BANDPASS FILTER" (672) and a "LOWER BANDPASS FILTER" (674). The output of the "UPPER BANDPASS FILTER" (672) is fed into a "COMPLEX MULTIPLIER" (678). The output of the "LOWER BANDPASS FILTER" (674) is fed into a block labeled "(.)*" (676). The output of the "(.)*" block (676) is fed into the "COMPLEX MULTIPLIER" (678). The output of the "COMPLEX MULTIPLIER" (678) is fed into a block labeled "Im(.)" (681). The output of the "Im(.)" block (681) is fed into a "LOOP FILTER" (682). The output of the "LOOP FILTER" (682) is fed into a "CLOCK PHASE ADJUSTER" (684). The output of the "CLOCK PHASE ADJUSTER" (684) is fed back to the switch (636(a)).

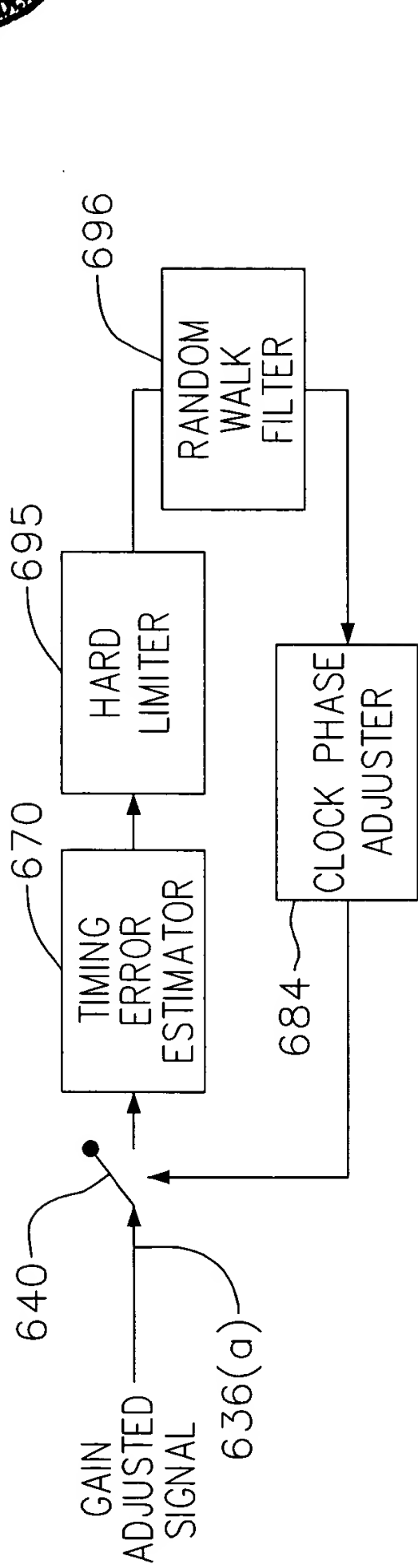


FIG. 32

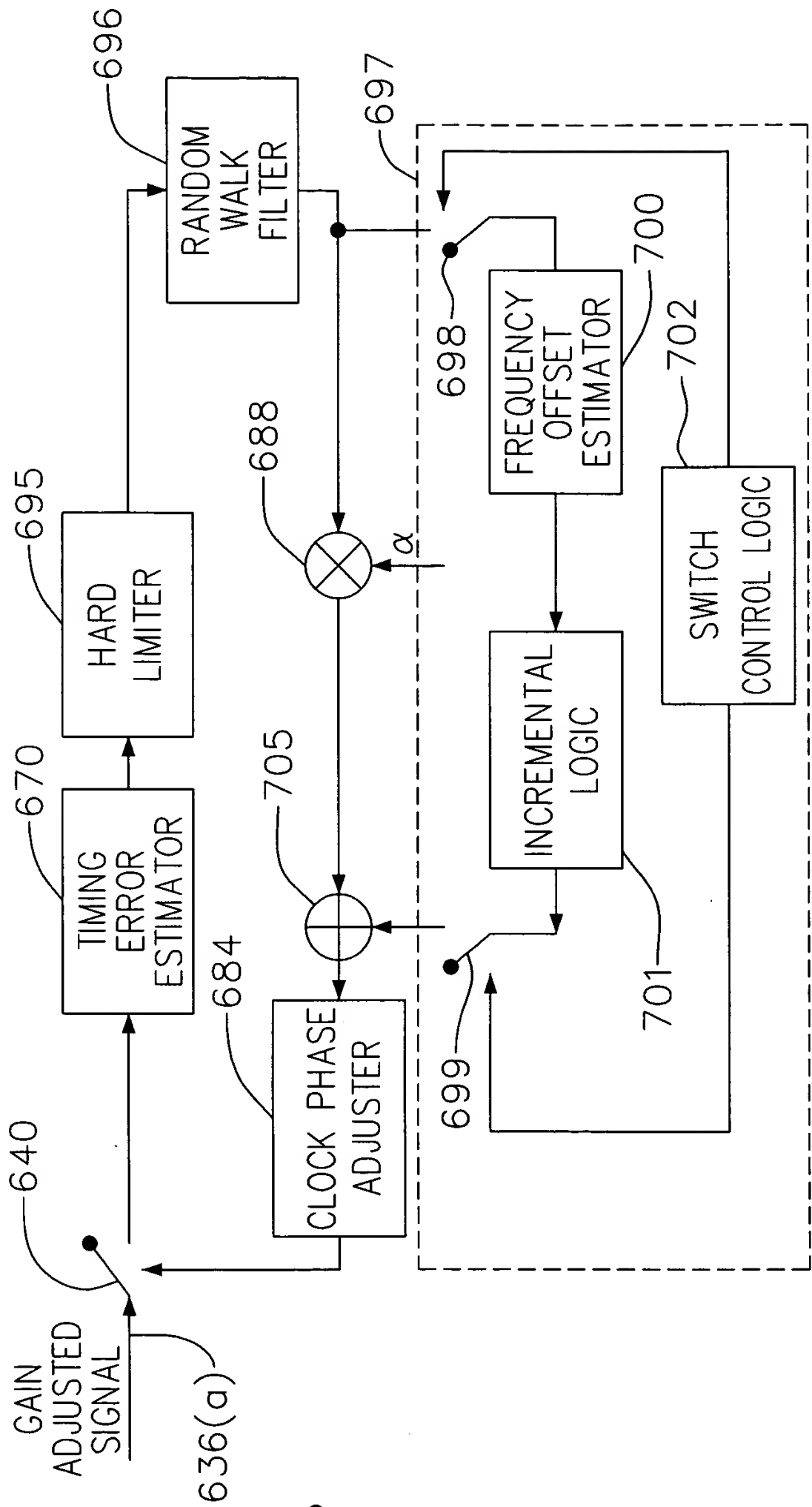
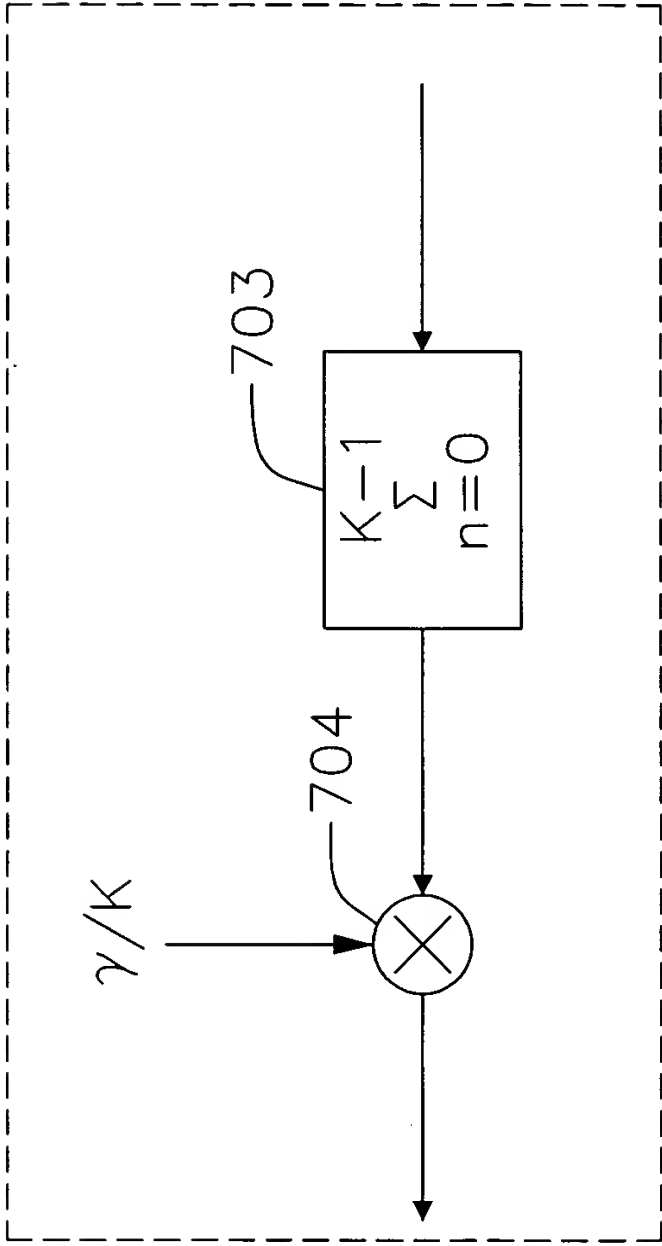


FIG. 33



FIG. 34

700



TIMING FREQUENCY
OFFSET ESTIMATE



FIG. 35

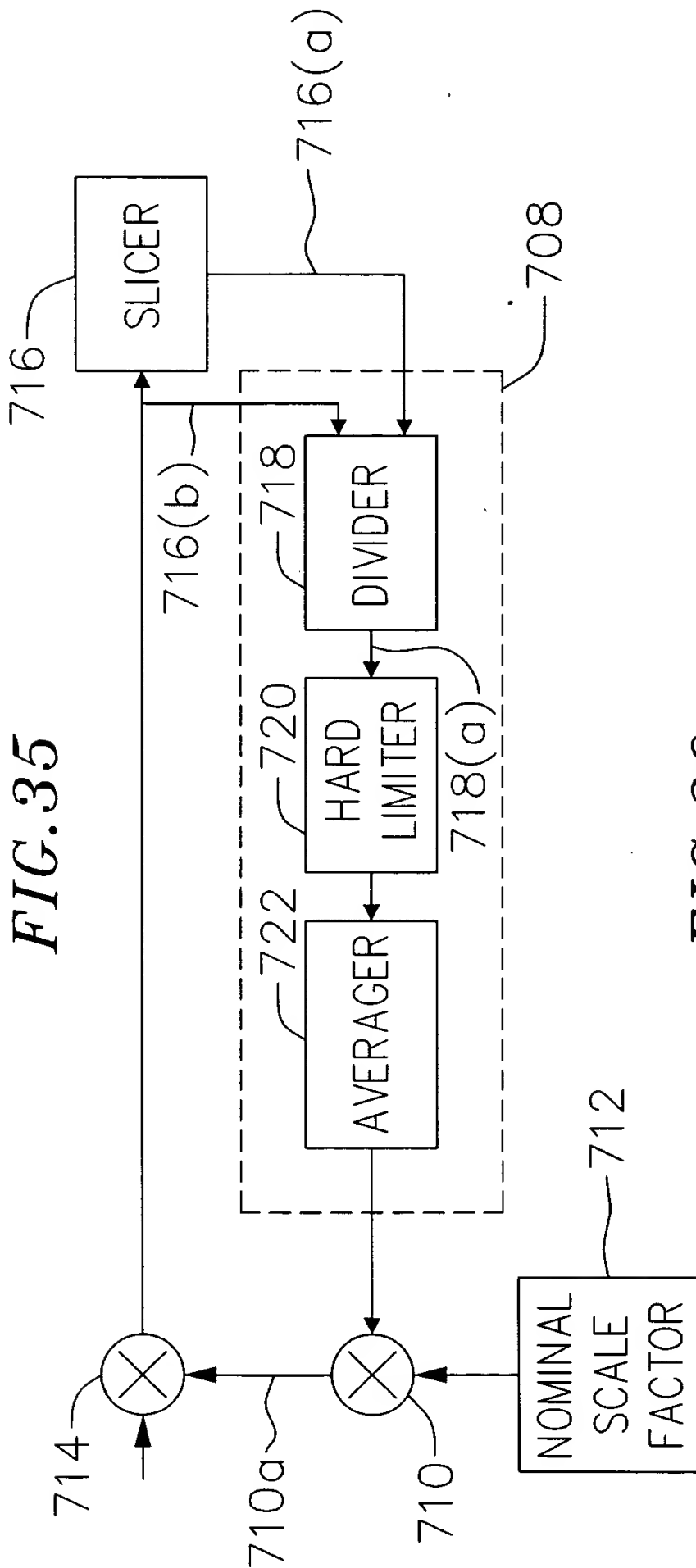


FIG. 36

